



REGULATION OF PRANAMAYAKOSHA THROUGH PRANAYAMA: A SIDDHAR YOGA PERSPECTIVE ON HOLISTIC HEALTH

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INTRODUCTION

The Panchakosha (Pancha = five; Kosha = sheath) is a fundamental framework in Indian spiritual philosophy and Siddhar Yoga that delineates human existence across five concentric, multidimensional sheaths surrounding the Aanma (Self) Ranging from the gross physical sheath to the innermost blissful state, these layers represent the progressive evolution of body, mind, life force, intellect, and consciousness, where optimal health relies on their harmonious function. Occupying a central, operational position, the Pranamayakosha (vital energy sheath) consists of Pranan (life force) flowing through the Nadis (subtle channels) and Vayus (vital airs), acting as the essential bridge connecting the physical body to the mind.

In Siddha medicine, Prana acts as the universal life force, Uyir Sakthi sustains physiological and psychological vitality, and Vayu governs its functional movement across five major currents: Pranan (respiration/cardiac), Apanan (elimination/reproduction), Samanan (digestion/metabolism), Udanan (speech/consciousness), and Vyanan (circulation/movement).

Together, these Vayus maintain the equilibrium of the three humors—Vali, Azhal, and Iyyam. Modern lifestyle stressors, sedentary habits, and pollution frequently disrupt this delicate flow, resulting in autonomic dysregulation and disease. Pranayama, the yogic science of breath regulation, systematically purifies the Nadis, enhances autonomic parameters like heart rate variability, reduces sympathetic overactivity, and improves overall respiratory efficiency. Ultimately, regulating the Pranamayakosha through Pranayama harmonizes Uyir Sakthi, stabilizes Mukkutram equilibrium, and provides a robust, non-pharmacological pathway to holistic health.

AIM

To explore and establish the role of Pranayama in regulating the Pranamayakosha (vital energy sheath) from a Siddhar Yoga perspective, integrating classical Siddha literature with modern scientific evidence to promote holistic health.

OBJECTIVES

- To review classical Siddha texts (Thirumandiram, Agathiyar Yoga Kaaviyam).
- Agathiyar 2000, Sivavakkiyam, Yugi Vaidhya Chinthamani, and Varmam Pura Maruthuvam and Sirappu Maruthuvam, noi nadal noi mudal nadal, siddha maruthuvanga surukkam) regarding the concepts of Pranamayakosha, Uyir, Vayu, and Uyir Sakthi.
- To analyze specific Pranayama techniques (Nadi Suddhi, Ujjayi, Bhramari, Kapalabhati, and Bhastrika) and their traditional mechanisms in maintaining the equilibrium of the three humors (Vali, Azhal, and Iyyam).
- To correlate classical Siddhar Yoga principles with modern scientific findings on autonomic regulation,

stress reduction, respiratory efficiency, and metabolic activation.

- To position Pranayama as a non-pharmacological, evidence-based approach for preventive, promotive, and integrative healthcare within Siddha medicine.

MATERIALS AND METHODS

- Study Design:** Narrative review
- Classical Sources:** Thirumandiram, noi nadal noi mudhal nadal, siddha maruthuvanga surukkam,, Agathiyar 2000, Sivavakkiyam, Yugi Vaidhya Chinthamani, Varmam Pura Maruthuvam and Sirappu Maruthuvam.

- Scientific Sources:** PubMed, Google Scholar, Scopus and keywords used to gather indexed scientific literature.

- Interventions** Five specific Pranayama techniques (Nāḍi Suddhi, Ujjayi, Bhramari, Kapalabhati, and Bhastrika).

LITERATURE REVIEW

PRANAMAYAKOSHA: (VALI UDAL)

Pranamayakosha, also known as Vali Udal in Siddha philosophy, is the vital energy sheath constituted by Pranā (vital life force) along with the five organs of action (Kānṁendriyas).

Sense Organ	Function
Ear (Auditory organ)	Perception of sound (hearing)
Skin (Tactile organ)	Perception of touch
Eye (Visual organ)	Perception of light and vision
Tongue (Gustatory organ)	Perception of taste
Nose (Olfactory organ)	Perception of smell

THE TEN VITAL AIRS (DASAVAYU) AND THEIR ROLE IN PRANAMAYAKOSA

The Prāṇamayakosa functions through ten forms of vital energy known as Dasavāyu (Ten Vital Airs). These govern all physiological and psychological activities.

1. Pranān (Heart centre)

- Located primarily in the chest region.
- Controls inhalation, respiration, heartbeat, swallowing, and sensory perception.
- It is the principal life force that sustains consciousness.
- Proper Pranayama strengthens Prāṇa Vāyu, improving oxygenation, vitality, and mental clarity.

2. Apanān (Muladhara centre)

- Situated in the lower abdomen and pelvic region.
- Governs excretion of urine, feces, menstruation, ejaculation, and childbirth.
- Responsible for elimination of toxins and waste products.
- Yogic breathing balances Apanā, promoting digestive and reproductive health.

3. Samānān (Navel centre)

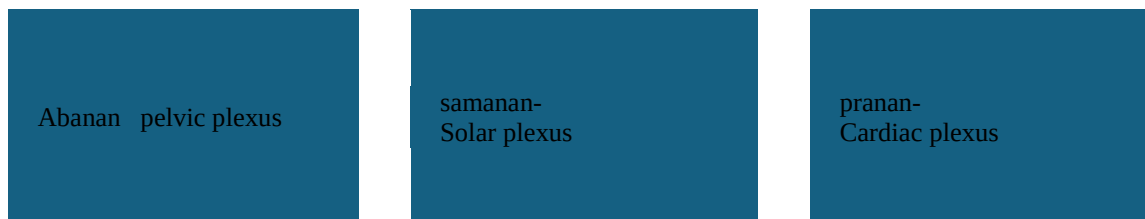
- Located around the navel region.
- Regulates digestion, absorption, metabolism, and distribution of nutrients.
- Acts as a balancing force between Prāṇa and Apanā.
- Controlled breathing enhances digestive fire and nutrient assimilation.

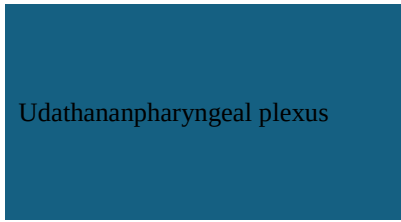
4. Udanān (Throat centre)

- Situated in the throat and head.
- Controls speech, memory, enthusiasm, growth, and higher consciousness.
- Facilitates upward movement of energy during meditation.
- Pranayama improves vocal strength, concentration, and spiritual awareness.

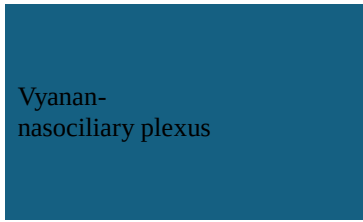
5. Vyānān (Forehead centre)

- Pervades the entire body.
- Governs circulation, movement of muscles and joints, and transmission of nerve impulses.
- Coordinates all bodily activities.
- Deep breathing practices enhance circulation and systemic energy distribution.





Udatanapharyngeal plexus



Vyana-nasociliary plexus

THE FIVE SUBSIDIARY AIRS

Nagan

- It stimulates and awakens awareness at all time
- It helps in producing or expressing good qualities ➤ It helps in opening and closing the eyes

Kurman

- Regulates blinking and protects the eyes.

Kirukaran

- Responsible for sneezing, hunger, and thirst.

Devathathan

- Governs yawning, somnolence, and relaxation dynamics.

Dhananjayan

- Remains in the body even after death for a period and maintains tissue integrity

Significance in Holistic Health

When these ten vayus function harmoniously.

- Respiration becomes efficient.
- Digestion improves.
- Waste elimination becomes regular.
- Circulation and nervous functions are optimized.
- Mental calmness and emotional stability are maintained.

Pranayama harmonizes these vayus, thereby regulating the entire Praṇamayakosha.

SUBTLE ENERGY CHANNELS (NADIS)

The Siddhar yoga describes 72,000 energy channels (nāḍis) through which Prāṇa flows. Among them, three are considered most important.

1. Iḍāgalai Nāḍi (Ida Nadi)

- Originates from the left side of the body.
- Associated with the Moon (Chandra).
- Represents cooling, nourishing, and calming energy.
- Connected with mental functions, intuition, and parasympathetic activities.

Terminates at the left nostril.

Functions

- Promotes relaxation.
- Enhances creativity and emotional balance.
- Reduces stress and excessive body heat.

2. Pingalai Nāḍi (Pingala Nāḍi)

- Originates from the right side of the body.
- Associated with the Sun (Surya).
- Represents heating, activating, and dynamic energy.
- Connected with physical activity, metabolism, and sympathetic nervous functions. Terminates at the right nostril.

Functions

- Stimulates vitality and alertness.
- Enhances digestion and metabolism.
- Supports physical strength and endurance.

3. Suzhumunai Nāḍi (Sushumna Nāḍi)

- Runs centrally along the spinal axis.
- Considered the most sacred nāḍi.
- Connects the lower energy centers with higher states of consciousness.

Functions

- Facilitates spiritual awakening.
- Maintains equilibrium between Ida and Pingala.
- Enables higher meditation and self-realization

ROLE OF PRANAYAMA IN NĀḌI REGULATION

- Alternate nostril breathing (Nāḍi Suddhi Pranayama)
- Purifies Ida and Pingala.
- Balances solar and lunar energies.
- Directs Prāṇa into Sushumna.
- Enhances concentration and meditative awareness.
- From the Siddhar perspective, balanced nāḍis ensure unobstructed flow of Prāṇa throughout the Praṇamayakosha, leading to harmony of body, mind, and spirit.
- Tridoṣa Equilibrium (Mukkuṭtram) and the Importance of Vali Regulation
- In Siddha medicine, health depends on the equilibrium of the three humors.

Vali (Vatham)

- Composed of Air and Ether elements.
- Governs movement, nerve impulses, respiration, circulation, and sensory activities.

Azhal (Pitham)

- Composed of Fire element.

- Governs digestion, metabolism, body temperature, vision, and intellect.

Iyyam (Kabam)

- Composed of Water and Earth elements.
- Governs stability, lubrication, immunity, and structural integrity. **Why Controlling Vali Regulates Azhal and Iyyam** The Siddhars emphasized.
- “Vali is the driving force of all physiological activities.”**
- Relationship Between Vali and Azhal
- Vali controls the movement and distribution of Azhal.

Disturbed Vali can aggravate Azhal, causing

- Hyperacidity
- Inflammation
- Anger
- Excess body heat

When Pranayama stabilizes Vali

- Digestive fire becomes balanced.
- Metabolic functions normalize.
- Emotional stability improves.
- Relationship Between Vali and Iyyam
- Vali governs movement of fluids and secretions.

Abnormal Vali may lead to accumulation of Iyyam causing

- Congestion
- Obesity
- Edema
- Lethargy

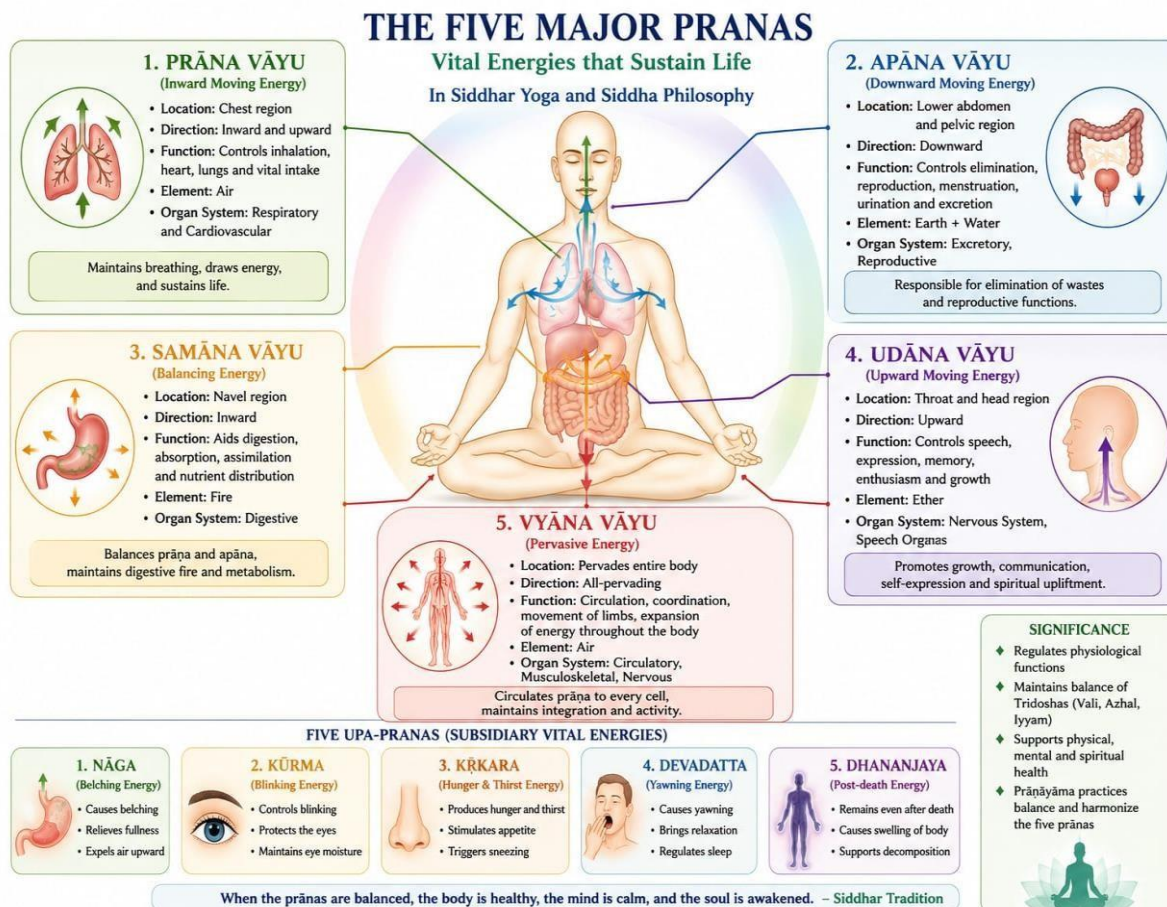
Balanced Vali ensures

- Proper circulation.
- Efficient lymphatic drainage.
- healthy tissue nourishment.

PRANAYAMA AND MUKKUTTRAM BALANCE REGULAR PRANAYAMA

- Normalizes respiratory rhythm.
- Calms the nervous system.
- Enhances circulation.
- Improves digestion and elimination.
- As Vali becomes balanced:
- Azhal remains within physiological limits.
- Iyyam maintains structural and immune functions.
- Homeostasis is achieved.
- Thus, regulation of breath directly contributes to regulation of Mukkuttram.

FIVE MAJOR PRANAS

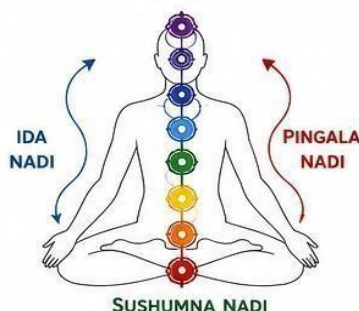


PRANAYAMKOSHA AND FIVE FUNCTIONS OF SENSE ORGANS

PRANAMAYA KOSHA AND FIVE FUNCTIONS OF SENSE ORGANS – SIDDHAR YOGA PERSPECTIVE –

PRANAMAYA KOSHA

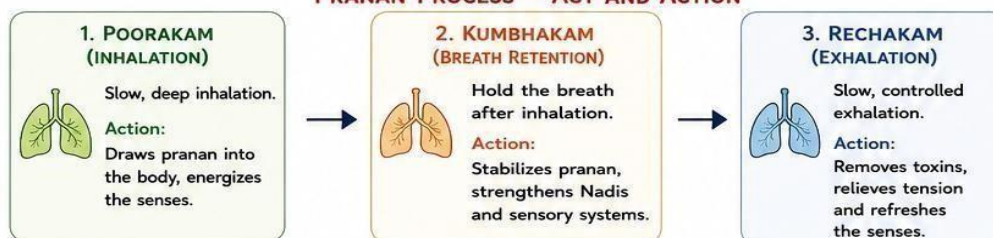
- ✦ Pranamaya kosha is the vital energy layer made up of Pranana (life force).
- ✦ It governs the life processes, senses, mind and energy channels (Nadis).
- ✦ Balanced pranana flow keeps the sense organs healthy and the mind stable.

ACT OF PRANANA

- ✦ Regulates and balances pranana in the body.
- ✦ Purifies Nadis and removes energy blockages.
- ✦ Strengthens the senses and stabilizes the mind.
- ✦ Enhances vitality, immunity and mental clarity.
- ✦ Leads to physical health, emotional balance and spiritual growth.

COMPARISON OF FIVE FUNCTIONS OF SENSE ORGANS WITH PRANAMAYA KOSHA

FUNCTION	SENSE ORGAN	ELEMENT	ROLE IN BODY (PHYSIOLOGICAL)	ROLE IN PRANAMAYA KOSHA	EFFECT OF IMBALANCE	HOW PRANANA HELPS (ACTION)
OSAI (SOUND)	EAR 	SPACE	Hearing, balance, understanding sound vibrations	Helps in receiving subtle vibrations (Nada), calms the mind	Tinnitus, hearing problems, restlessness, mental disturbance	Pranagama calms the mind, reduces stress and improves inner hearing capacity
OORU (TOUCH)	SKIN 	AIR	Sensation, touch, temperature, pressure	Maintains pranic flow through the skin and sensory nerves	Skin diseases, dryness, numbness, anxiety	Pranagama improves circulation of pranana, balances Vata and nourishes the skin
OLI (SIGHT)	EYE 	FIRE	Vision, perception of form, color and light	Pranana nourishes the eyes and optic nerves; supports inner vision	Weak eyesight, eye strain, headache, lack of concentration	Pranagama improves oxygen supply to eyes, relaxes eyes and enhances vision
SUVAI (TASTE)	TONGUE 	WATER	Taste, digestion initiation, nutrition recognition	Pranana activates taste receptors and supports digestion (Agni)	Loss of taste, indigestion, acidity, weak metabolism	Pranagama balances digestion fire, reduces acidity and enhances taste perception
NATRAM (SMELL)	NOSE 	EARTH	Smell detection, breath regulation, survival instinct	Pranana flows through nose; purifies and energizes the body	Sinus problems, allergies, loss of smell, lethargy	Pranagama clears nasal passages, improves breathing and increases pranic vitality

PRANANA PROCESS – ACT AND ACTIONOVERALL BENEFITS

- ✓ Improves clarity, sensitivity and efficiency of all senses.
- ✓ Reduces dependence on external stimuli.
- ✓ Enhances inner perception and intuitive awareness.
- ✓ Supports physical health, mental peace and spiritual growth.

KEY TAKEAWAY

Through regular practice of pranana, pranana is balanced in pranamaya kosha, the Nadis are purified and the five sense organs function in harmony, leading to holistic health and higher consciousness.



BALANCED PRANANA

→ HEALTHY SENSES

→ STABLE MIND

→ HIGHER CONSCIOUSNESS



PRANAYAMA

Pranayama is the scientific regulation and control of breathing. It is performed by controlling inhalation, retention, and exhalation. Regular practice improves physical, mental, and spiritual health.

Some Important Rules of Pranayama

- To practice Pranayama, one must possess a sattvic / virtuous nature
- Only after clearly understanding the principles of the three types of nadis and the vayus should one undertake this practice.
- This practice should be done in a place with good ventilation...

Components of Pranayama

- Purakam (Inhalation) – Drawing air into the lungs.
- Kumbakam (Retention) – Holding the breath for a specific period.
- Rechakam (Exhalation) – Releasing the air slowly and completely.

Basic Ratio

Traditional breathing ratio

Purakam: Kumbakam: Rechakam = 1: 4: 2 Example.

- Inhale for 4 seconds. • Hold for 16 seconds.
- Exhale for 8 seconds.

Duration of Practice

- Beginners should start with 2–4 rounds.
- The duration can be increased gradually with regular practice.
- A complete session may include 20–80 breathing cycles, depending on the practitioner's capacity and training.

Pranayama

The Lord of the five senses—the Master of that realm—rides a steed that saves the soul; it offers a sure anchor to the truthful, yet casts aside the false, causing them to stumble and fall.

Thirumandiram - 564

The Five (Aivar) refers to the five senses: body/touch, mouth/taste, eye/sight, nose/smell, and ear/hearing. The **Master/Leader** who governs and controls these five senses is the Supreme Being (Paramatman). The **horse** that he rides to elevate and save these souls is unique. (It is the breath, or Prana Vayu.) For true devotees who hold onto the divine feet of the Lord, this horse (breath) becomes controlled and restrained. For untruthful people who lack devotion to God, it will not submit or stay controlled. Leaping and falling (Thulli vizhunthidum) means it will leap wildly and throw them down headfirst. Because the breath leaps and moves dynamically, it is compared to a horse breath control (Pranayamam), the mind will not wander wildly. It will achieve one-pointed focus and become completely restrained.

The Life-Force Air That Nurtures the Soul (Prana)

If the *Prana* (vital breath) remains stilled in union with the Supreme Self, there is neither birth nor death; when the *Prana* is transformed and awakens the faculty of speech, one attains the state of true realization.

Thirumandiram (567)

When the breath (prana) merges deeply with the mind without wavering, and stays still, there is no cycle of birth and death. However, when the breath diverts its course, it manifests as speech and intellectual thought. Thus, you experience the physical movement and passage of life.

Three Stages of Breath Control

Inhalation (*Puraka*) is performed through the left nostril; retention (*Kumbhaka*) is held for sixty-four counts; exhalation (*Rechaka*) takes place over thirty-two counts. Deviating from this prescribed rhythm is a deception that leads to harm.

— Thirumandiram (568)

Inhaling through the left side (nostril) for sixteen counts is Pooraka. Holding it calmly inside for sixty-four counts is Kumbhaka. Exhaling smoothly for thirty-two counts is Rechaka. Alternating this process without deceit is the proper practice.

Practice this daily—and become a master.

Wherever you are, within the inner sanctum of the self, perform this practice; the vital force knows no decay there. To traverse the path from the point of attachment to the point of release—truly, one becomes a master.

Thirumandiram (570)

By focusing the mind to still the breath within the subtle channels of the body, the aged become youthful and the withered bloom anew; the feet of the Lord and the Mother—filled with grace—are the ultimate truth.

Siva Vakkiyar

Siddhar Yoga Perspective on Holistic Health

According to Siddhar Yoga, PRANAYAMA is not merely a breathing exercise but a powerful method to regulate the Pranamayakosha. Through

- Harmonization of the Dasavayus,
- Purification of Ida, Pingala, and Sushumna Nāḍis,
- Maintenance of Mukkutram equilibrium
- **PRANAYAMA promotes**
- Physical Health
- Improved respiratory efficiency
- Better digestion and circulation
- Enhanced immunity and vitality
- Mental Health
- Reduced stress and anxiety
- Improved concentration and memory
- Emotional balance
- Spiritual Health
- Awakening of higher consciousness
- Enhanced meditation

- Progress toward self-realization.

SPECIFIC PRANAYAMA TECHNIQUES & PHYSIOLOGICAL CORRELATIONS

Naḍi Suddhi (Alternate Nostril Breathing)

Siddha Perspective

Cleanses blocked Naḍis, balances Iḍagalai and Piṅgalai, and regulates erratic Vali Vayu.

Scientific Mechanisms

- Enhances autonomic regulation by boosting heart rate variability (HRV) parameters (SDNN, RMSSD, High-Frequency power).
- Activates pulmonary stretch receptors (SARs) through deep inhalation/exhalation, increasing vagal tone and lowering systemic blood pressure

Ujjayi (Victorious / Ocean Breath)

Siddha Perspective

- Stabilizes Praṇa Vayu, increases internal thermal energy (Azhal), and calms mental fluctuations

Scientific Mechanisms

- Glottic resistance increases intrathoracic pressure, preventing alveolar collapse and enhancing pulmonary perfusion.
- Slow rhythmic cadence (~6 cycles/min) synchronizes cardiorespiratory resonance, modulating baroreflex sensitivity.

Bhramari (Humming Bee Breath)

Siddha Perspective

- Alleviates aggravated Azhal, purifies cranial channels via Udana Vayu, and relieves emotional strain.

Scientific Mechanisms

- Laryngeal vibrations trigger endogenous production of Nitric Oxide (NO) in paranasal sinuses, enhancing pulmonary vasodilation.
- Induces strong parasympathetic predominance, lowering blood pressure and acute stress indices.

Kapalabhati (Frontal Brain Cleansing)

Siddha Perspective

- Liquefies and clears excess Iyyam (mucus) stagnation, activates Jatharāgni (metabolic fire), and cleanses the skull (Kapala).

Scientific Mechanisms

- Rapid forceful exhalations induce short bursts of sympathetic activation, boosting ventilation and clearing hypercapnia.
- Enhances prefrontal cortical oxygen delivery and improves cognitive alertness.

Bhastrika (Bellows Breath)

Siddha Perspective

- Mobilizes Vyana Vayu, clears blockages within Suzhumunai, and rejuvenates overall vitality (Uyir Sakthi).

Scientific Mechanisms

- High-frequency deep respiration boosts cellular oxygen uptake, systemic perfusion, and respiratory muscle stamina. Refractory hyperventilation modulates central nervous system excitability, supporting deep focus during meditation.

Technique	Primary Siddha Target	Target Vayu	Modern Physiological Markers
Naḍi Suddhi	Channel purification, Naḍi balance	Vali, Iḍagalai / Piṅgalai	Increased HRV (HF power), reduced SBP/DBP
Ujjayi	Pulmonary efficiency, mental focus	Praṇa Vayu	Cardiorespiratory resonance, increased vagal tone
Bhramari	Cranial channel relief, emotional stability	Udana Vayu	Lower stress index, elevated paranasal Nitric Oxide (NO)
Kapalabhati	Iyyam clearing, metabolic ignition	Iyyam, Samāna Vāyu	Increased prefrontal cortex oxygenation
Bhastrika	Rejuvenation, clearing central channel	Vyana Vayu	Enhanced aerobic capacity, cellular oxygenation

THE FIVE SHEATHS OF HUMAN EXISTENCE AND REGULATION THROUGH PRANAYAMA

PANCHAKOSHA MODEL IN SIDDHAR YOGA

The Five Sheaths of Human Existence and Regulation through Prāṇāyāma

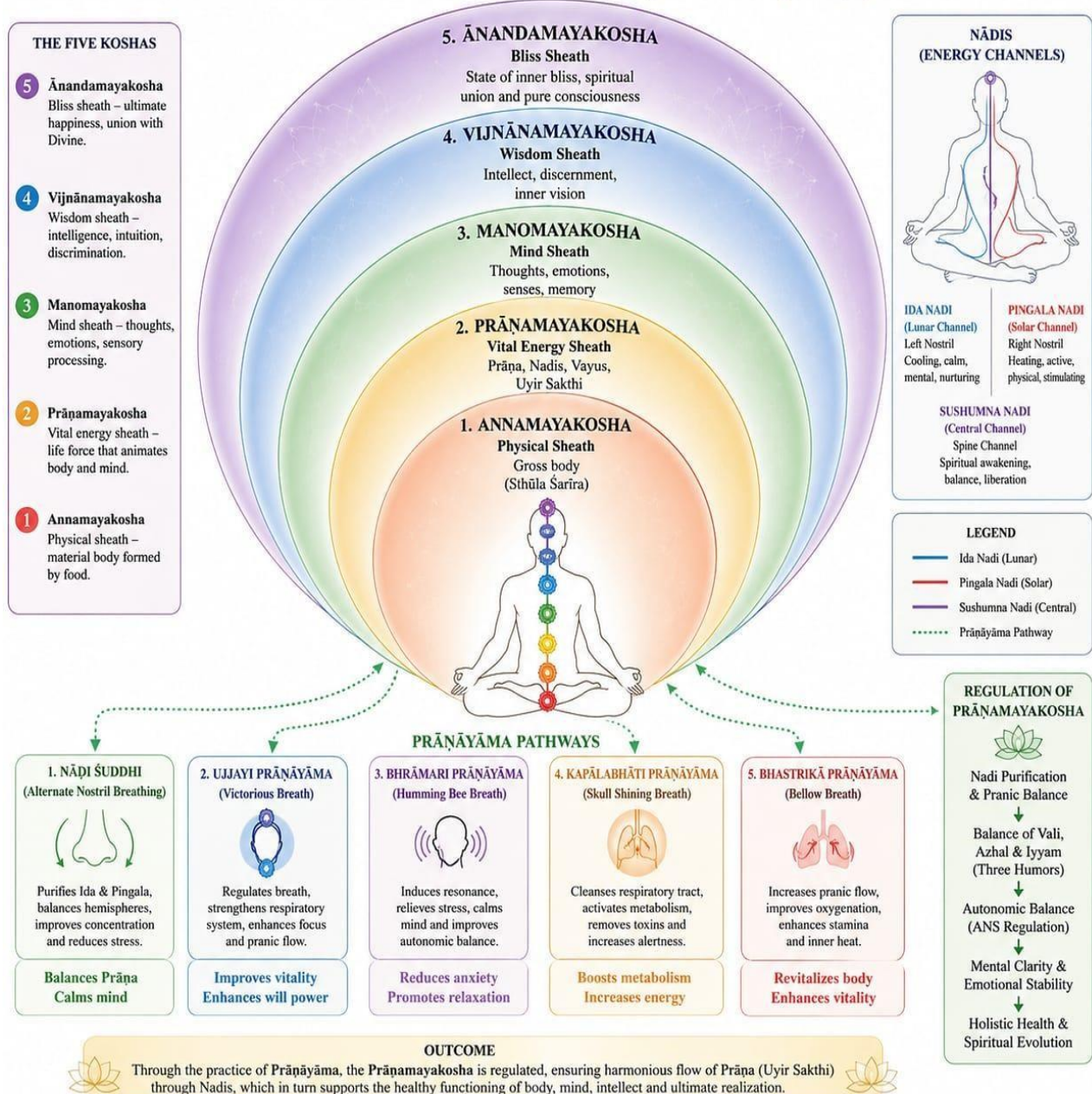


Figure 1. Panchakosha model in Siddhar Yoga: Five sheaths of human existence, Nadis and Pranayama pathways leading to regulation of Pranamayakosha and holistic well-being.

DISCUSSION

The synthesis of classical siddhar yoga philosophy and modern neuro-autonomic physiology provides compelling evidence for the role of PRANAYAMA in regulating the prāṇamayakosha (vital energy sheath). Siddhar literature conceptualizes human life as an integrated energetic system where prāṇa animates bodily functions via ten vital airs (dasavayu) flowing through 72,000 subtle channels (nādis). Central to siddha pathology and physiology is the principle that Vali (Vata humor) acts as the primary driving force governing all

neural impulses and bodily movements. Consequently, any disturbance in Vali destabilizes Azhal (Pitta) and Iyyam (Kapha). Regulating breath directly stabilizes Vali Vayu, thereby restoring overall Mukkuttam equilibrium and maintaining homeostasis across the five sense organs (Panchendriyas).

Modern physiological research closely parallels these traditional principles by showing how targeted breathing techniques directly modulate autonomic nervous system activity, cardiovascular resonance, and metabolic rate.

Alternate nostril breathing (nāḍi suddhi) stimulates pulmonary stretch receptors to enhance vagal efferent activity, increasing heart rate variability (hrv) parameters and lowering blood pressure. Practices like ujjayi and bhramari increase intrathoracic pressure and stimulate paranasal sinus nitric oxide release, inducing deep relaxation and improving pulmonary perfusion. Conversely, rapid techniques like kapalabhati and bhastrika clear excess iyyam (mucus stagnation), enhance prefrontal cortical oxygenation, and boost cellular respiration.

CONCLUSION

In Siddhar Yoga, the Prāṇamayakosha serves as the vital bio-energetic link bridging the physical structure (Annamayakosha) with the psychological state (Manomayakosha). Systematic breath regulation through PRANAYAMA harmonizes the Dasavayus, purifies the subtle channels (Idāgalai, Piṅgalai, and Suzhumunai), and maintains the balance of Vali, Azhal, and Iyyam. Because Vali governs all physiological movement, its stabilization through conscious breathing inherently normalizes Azhal and Iyyam, restoring complete physiological balance. Integrating traditional Siddhar wisdom with contemporary autonomic and respiratory evidence positions PRANAYAMA as a cost-effective, non-pharmacological modality for mitigating modern stress-induced autonomic dysregulation. This perspective strengthens the relevance of Panchakosha theory in preventive, promotive, and integrative healthcare. Future standardized clinical trials using integrated biomarkers—such as HRV, stress hormones, and classical Mukkutram assessments—are recommended to further validate evidence-based Siddha therapeutic protocols.

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