

Upanishadic View Of Pranayama Techniques: A Conceptual Dimension With Special Reference To Yogachudamanyu Upanishad

Pratibha Rani^{1*}, Dr. Gaurav²

^{1*}Research Student, Department of Yoga, Himalayan Garhwal University, Pauri Garhwal Uttarakhand.

²Assistant Professor, Department of Yoga, Himalayan Garhwal University, Pauri Garhwal Uttarakhand.

Abstract

This article has extensively explained Pranayama in the light of the ancient Yoga text Yogachudama Upanishad, other important Hatha Yoga texts and modern scientific research. In this, Pranayama is not limited to breathing process only, but it is presented as a scientific and spiritual practice that leads towards self-realization and Chittavritti-nirodh. The method, benefits, and spiritual elements of Pranayama have been explained in depth in Yogachudama Upanishad, where its goal is to cleanse the nerves, control the mind and attain self-knowledge. Also, through modern research, it has been proved that Pranayama not only provides relief from mental stress, anxiety and diseases, but it also strengthens overall health by having a positive effect on the heart, lungs, nervous system and brain. Thus, this article acts as a bridge between the Yogic tradition and scientific utility of Pranayama, which proves it to be extremely relevant and necessary in contemporary life as well. Introduction Pranayama is such a great tool in Indian Yoga Shastra that it is not only the basis of physical health, but is also a very useful practice in the direction of concentration of mind, purification of nerves and self-realization. The glory of Pranayama has been specially described in Vedas, Upanishads, Mahabharata, Bhagavad Gita and Hatha Yoga texts. Among these texts, "Yogachudramanyupanishad" is a special Upanishad, which is included in the Upanishads focused on Hatha Yoga.

According to Yogachudramanyupanishad, Pranayama is not just the control of breath, but it is a subtle and spiritual process of coordination of body, life and mind – these three. This Upanishad considers Pranayama as an essential step of Yoga path and presents a sequential method of first purification of nerves, then practice of Rechak, Purak and Kumbhak. It is clearly stated in it that till the nerves are not pure, the control of life is not complete and neither the mind is stable.

The various names of the pranayama mentioned in this Upanishad – like Nadi Shodhana, Surya Bhedi, Ujjayi, Shitali, and Bhramari – show that Yoga is not just a subject of meditation but a scientific and disciplined system. The ancient sages did not confine pranayama to health benefits but rather established it as a process leading to self-improvement and Brahman knowledge.

According to the Yogachudamanyu Upanishad, the practice of pranayama not only controls the senses but also removes the restlessness of the mind, thereby making meditation and Samadhi states easy. This is why this Upanishad calls pranayama the “greatest penance of ascetics.” Therefore, the methods and principles of Pranayama described in Yogachudamanyupanishad are not only a guide for yoga practitioners, but are also an invaluable treasure that provides peace and balance even in the turbulent conditions of modern life.

Research in the field of Pranayama

In recent years, many scientific and medical researches in the field of Pranayama have proved its effectiveness. Researches have made it clear that Pranayama not only improves the respiratory system, but it is also very beneficial in mental conditions like stress, anxiety and depression. Many studies

have found that regular Pranayama controls heart rate, balances blood pressure, and increases lung function. Especially, experiments conducted on Pranayamas like Nadi Shodhan, Anulom-Vilom, Kapalabhati and Bhramari have proved that they increase the alpha waves of the brain, which increase mental peace and concentration.

Researches in the field of psychology and neuroscience show that the practice of Pranayama activates the nervous system and strengthens the parasympathetic nervous system, which brings balance in the entire emotional response of a person. Also, it has been observed that Pranayama acts as an adjuvant therapy in chronic diseases like cancer, diabetes, asthma and insomnia. Research in the field of education indicates that the practice of pranayama improves memory, learning ability, and exam performance in students.

Thus, modern research proves that the pranayama techniques described in the ancient yogic science are extremely useful and scientifically effective in addressing today's lifestyle diseases and mental stress. This is an important step towards the integration of yoga and medical science.

Pranayama, a set of yogic breathing techniques, shows various beneficial effects on both mental and physical health. These techniques affect physiological systems, improve emotional well-being, and enhance respiratory and cardiovascular functions.

Mental Health Benefits • Anxiety and emotional processing: Pranayama significantly reduces anxiety and negative affect by modulating brain regions involved in emotional processing, such as the amygdala and prefrontal cortex. It also reduces functional connectivity in regions related to emotion and attention, suggesting better emotional regulation¹.

Physiological health benefits • Heart rate variability (HRV): Pranayama increases HRV, indicating increased activity of the parasympathetic nervous system. This effect is more pronounced with externally paced breathing techniques than with self-paced techniques². **Asthma and respiratory function:** Pranayama improves asthma control and quality of life, although it does not significantly change pulmonary function test values³. It also increases exercise tolerance in COPD patients, suggesting potential as an option for pulmonary rehabilitation⁴. **Cardiovascular and autonomic effects:** Various techniques of pranayama can stimulate or relax the autonomic nervous system, affecting heart rate and blood pressure. Techniques such as alternate nostril breathing are particularly effective in reducing these parameters^{7 10}.

Mechanisms and wider effects

Physiological mechanisms: Pranayama activates various physiological pathways, including mechanoreceptors and chemoreceptors, affecting the respiratory-circulatory control centers of the brain and the autonomic nervous system⁹.

• **General health benefits:** Pranayama is associated with improvements in neurocognitive, psychophysiological and metabolic functions, and is beneficial in the management of conditions such as asthma, COPD and cardiovascular disease^{5 6}.

Pranayama provides significant benefits for mental and physical health, particularly in reducing anxiety, enhancing respiratory function and improving cardiovascular health. These effects are mediated through complex physiological mechanisms, making pranayama a valuable practice for both therapeutic and general health purposes. Further research is needed to fully understand its mechanisms and optimize its application.

Pranayama mentioned in Yogachudamani Upanishad 11

Pranayama has been mentioned in Yogachudamani Upanishad from a very deep and spiritual point of view. In this Upanishad, Pranayama is not just a process of breathing and exhalation, but it is seen as a spiritual practice, which leads the seeker towards self-knowledge and salvation. Through Pranayama, the nerves of the body are purified and the prana vayu settles in the heart and gives peace to the mind. It is clearly stated in the Upanishad that when the nerves are purified, then the mind of

the yogi becomes stable and he gets the path to see the soul. By practicing this, mental disorders like lust, anger, greed are destroyed and the seeker becomes situated in the Sattva Guna by conquering the senses.

Pranayama has been described in the Upanishad as sacred like a mantra and a part of internal practice, which purifies the inner conscience of the seeker and he enters the depth of meditation. Also, Pranayama is presented as a preliminary preparation for self-realization, Kundalini awakening, and Brahmajnana. Thus, Yogachudamanyu Upanishad, instead of considering Pranayama as a mere physical practice, respects it as a higher practice of Yogamarga, which ultimately leads the seeker to ultimate peace and liberation. It is described that -

Pranapana Samanaakhya
Vyanodanau Cha Vayavah 22 Nagah Kuryoth Kukro Devadatto Dhananjayah. Hridī pranah sthito
nityampano gudmandale 23 Samano nabhideshe tu udanah kanthmadhyagah. 24

Sun, Moon and Fire are the bikes of God Prabha. Prana, Apana, Udana, Samana, Bayan – these are called five vital airs. Chaga, Kurma, Kukal, Devdutt and Dhananjay are said to be the five sub-breaths. Inside the body, Pranavayu (main) remains stable in the heart, Apana in the anus, Samana in the navel, Udyā in the throat and Vyanababu remains stable in the entire body. These main vital airs are located in five places of the body. 22-24□

Udgaare naag aakhyatah kurma unmeelane and. Cooker Shunkari Gyeyo Devadto Vijumbhane □25□
In Karyavayu (scar) Jaaga Jamaka Upprana is there, in blinking of eyes Kurmavayu, in sneezing Kukal
and the state of Dev is in yawning. 25□

Method of Pranayama in Yogachudamani Upanishad 11

The method of Pranayama has been presented in a very scientific and systematic manner in Yogachudamani Upanishad. According to the Upanishad, before practicing Pranayama, the practitioner should be stable in the posture, have control over the senses and be pure in mind. There are mainly three parts mentioned in the process of Pranayama – Purak (inhalation), Kumbhaka (holding the breath) and Rechak (exhalation). By practicing these three according to a specific sequence and rules, the nerves are purified and the mind becomes stable.

The Upanishad states that Pranayama should first be done for the purpose of Nadi Shuddhi, for which methods like Anulom-Vilom are specifically indicated, although their names are not given directly. When the nerves are purified, then the practitioner can easily do long Kumbhaka and control the tendencies of the mind. It has also been told that in the practice of Pranayama, one should keep in mind desha (place), kaal (time) and number (calculation), so that it becomes long and subtle.

Rules, restraint, and regularity are said to be essential for the practice of Pranayama. Its practice should be done as per the scriptures under the guidance of the Guru, so that the seeker can control the movement of life and move in the direction of enlightenment.

Chandrashen Samabhyasya Suryashenaabhyasetpunah ya tulya tu bhavetasankhya tato mudraam
visarjayet □67□

In the sequence of practice, first of all practice catharsis by inhaling from the left nostril 'Chandraansh', then practice catharsis by inhaling from the right nostril 'Suryaansh'. When both the notes (moon and sun) become equal, then the practice should be stopped. 67 □

In Pranayam, first of all inhale (complete) the breath from Ida Nadi i.e. the left voice. Again purify the breath with Pingala Nadi i.e. the right voice (again do the opposite). In this way, by practicing meditation on both Moon and Sun while doing Pranayama in the manner described earlier, Nadishodhan is achieved in just two months.⁹⁸

नादशुद्धिर्मात्रेणैव प्राप्यते ।
नादाभ्यासोऽथवा नादिशुद्धयौ ।
नादाभ्यासात्तारोग्याम जायते नदिशुद्धानात् ।⁹⁹

'By doing Nadishodhan Pranayama, when the nadis are purified, one gets the capacity to hold air adequately and with the benefit of health, the digestive fire becomes strong and divine sound starts

being heard. 99□ Prano dehasthito yavadpaanam tu nirundhayet. Ekashwasamy quantity vertical counting speed: □ 100□

In Pranayama, in the Kumbhaka position, as long as the air remains inside, Apana should also hold the air. In this way a quantity of breath moves up and down in the heart space. 100□

Rechakah purokashchaiva kumbhakah pranavaatkah. Pranayamo bhavedevam
matradvadashsamyutah ॥ 101 ॥ Puraka, Kumbhaka and Rechak, these three activities of Pranayama
are the form of Sakshat Pranav (with this thinking) twelve quantities Pranayama should be done ॥101
॥.

Matradwadashsamyuktau diwakarnishakarou. Doshjalambanantau jnatavyu yogibhih sada ll. 102□
This twelfth quantity Pranayama of Sun and Moon eliminates all the defects of the seeker. 102□

Matradwadashamyuktau diwakarnishakarou. □□□□□□□□□□ □□□□□□□□
 □□□□□□ □□□□ 102□ This 12th Matra Pranayama of Sun and Moon eliminates all the faults of
 the seeker. □102□

Purakam Dvadasham Kuryatkumbhakam Shodasham Bhavet. Rechakam Dash Chonkar: Pranayama: S Uchyate □ 103 □ Pranayama of twelve quantities in Puraka, sixteen quantities of Kumbhaka and ten quantities of Rechak is called Omkar Pranayam. 103 □ Adhame Dvadash Matra Madhyame Dwiguna Mata. Uttame Triguna Prokta Pranayamsya Nirjanah □ 104 □ This pranayama of twelve quantities is of normal quality, double of this quantity is of medium quality and pranayam of its second i.e. thirty-six quantities is of excellent quality. 104 □ Adhame svedjananam kampo bhavati madhyame.

[illegible]

stopping the nine doors through which the air flows and by mixing the apan with the adhi and making it move upward, establish it firmly above the Kundalini route in the brain with the help of Shakti Chalini Mudra. As long as this remains stable, he does not want the company of (other) great men, that is, he himself becomes the best. 107 □ Pranayamo bhavedevam patakendhanpavakah. Bhavoddhimahasetuh prochyate yogibhih sada □ 108 □ This pranayama is like a great bridge for liberation from the worldly ocean and is like a fire that burns the fuel of sin, this is often said by yogis. 108 □ Asanen Rujan Hanti Pranayamen Patakam. Vikaram Manasam Yogi Pratyaharen Munchati □ 109 □ Physical diseases are cured by the asanas of yoga, sins are destroyed by doing pranayam and mental diseases are cured by doing pratyahara. 109 □

Summary

In Yogachudamanyu Upanishad, Pranayama is considered to be a very important part of Yoga Sadhana. In this, the benefits of pranayama practice have been presented from an esoteric and spiritual point of view. According to the Upanishad, when a yogi regularly practices Pranayama, his nadis (nerves) become pure, due to which the flow of prana becomes smooth and it starts becoming stable in the heart. After attaining this state, the path of salvation becomes clear for the yogi, that is, the door of spiritual progress opens.

By practising Pranayama, the body of the yogi becomes pure, the mind becomes concentrated and the senses become controlled. Mental disorders like lust, anger, greed, attachment are destroyed and the practitioner experiences pure consciousness by rising above all the three gunas. It is also said in the Upanishad that the yogi who becomes adept in Pranayama becomes free from diseases, calm in mind,

and stable in meditation. It is through Pranayama that one can enter a higher state of intuition and self-reflection.

So, according to Yogachudamanyu Upanishad, Pranayama is not only a process of breathing, but it is also a powerful tool that leads the seeker towards purification of the body as well as the soul, which ultimately paves the way for self-realization and attainment of salvation.

References:

1. Novaes, M., Palhano-Fontes, F., Onias, H., Andrade, K., Lobão-Soares, B., Arruda-Sanchez, T., Kozasa, E., Santaella, D., & De Araujo, D. (2020). Effects of Yoga Respiratory Practice (Bhastrika pranayama) on Anxiety, Affect, and Brain Functional Connectivity and Activity: A Randomized Controlled Trial. *Frontiers in Psychiatry*, 11. <https://doi.org/10.3389/fpsyt.2020.00467>.
2. Sharpe, E., Lacombe, A., Sadowski, A., Phipps, J., Heer, R., Rajurkar, S., Hanes, D., Jindal, R., & Bradley, R. (2021). Investigating components of pranayama for effects on heart rate variability.. *Journal of psychosomatic research*, 148, 110569 . <https://doi.org/10.1016/j.jpsychores.2021.110569>.
3. Yüce, G., & Taşçı, S. (2020). Effect of pranayama breathing technique on asthma control, pulmonary function, and quality of life: A single-blind, randomized, controlled trial.. *Complementary therapies in clinical practice*, 38, 101081 . <https://doi.org/10.1016/j.ctcp.2019.101081>.
4. Kaminsky, D., Guntupalli, K., Lippmann, J., Burns, S., Brock, M., Skelly, J., Desarno, M., Pecott-Grimm, H., Mohsin, A., LaRock-McMahon, C., Warren, P., Whitney, M., & Hanania, N. (2017). Effect of Yoga Breathing (Pranayama) on Exercise Tolerance in Patients with Chronic Obstructive Pulmonary Disease: A Randomized, Controlled Trial.. *Journal of alternative and complementary medicine*, 23 9, 696-704 . <https://doi.org/10.1089/acm.2017.0102>.
5. Jayawardena, R., Ranasinghe, P., Ranawaka, H., Gamage, N., Dissanayake, D., & Misra, A. (2020). Exploring the Therapeutic Benefits of Pranayama (Yogic Breathing): A Systematic Review. *International Journal of Yoga*, 13, 99 - 110. https://doi.org/10.4103/ijoy.ijoy_37_19.
6. Saoji, A., Raghavendra, B., & Manjunath, N. (2018). Effects of yogic breath regulation: A narrative review of scientific evidence. *Journal of Ayurveda and Integrative Medicine*, 10, 50 - 58. <https://doi.org/10.1016/j.jaim.2017.07.008>.
7. Kumari, P., Rajesh, S., & K, R. (2024). Effect of Pranayama on Human Body and Mind. *International Journal of Ayurvedic Medicine*. <https://doi.org/10.47552/ijam.v15is1.5574>.
8. Nivethitha, L., Mooventhana, A., & Manjunath, N. (2016). Effects of Various Prāṇāyāma on Cardiovascular and Autonomic Variables. *Ancient Science of Life*, 36, 72 - 77. https://doi.org/10.4103/asl.ASL_178_16.
9. Mondal, S. (2024). Proposed physiological mechanisms of pranayama: A discussion. *Journal of Ayurveda and Integrative Medicine*, 15. <https://doi.org/10.1016/j.jaim.2023.100877>.
10. MI, S., & Ghosh, A. (2021). Effect of Pranayama on Cardiovascular Parameters among Indian Population- A Narrative Review. *International journal of current research and review*, 13, 172-175. <https://doi.org/10.31782/IJCRR.2021.13237>.
11. 108 Upanishads (with simple Hindi meaning) Sadhna Khand, Editor Ved Murti Taponishtha Pandit Shriram Sharma Acharya, Bhagwati Devi Sharma, Publisher Yug Nirman Yojana Extension Trust, Gayatri Tapobhoomi Mathura (2010) Page 214-15