



## **Scientific basis of Yoga and Pranayama**

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### **Abstract**

India is credited with being the birthplace of yoga thousands of years ago. In today's day and age, an alarming awareness has been observed in health and natural remedies among people as a result of yoga and pranayama, which has been proven to be an effective method for improving health in addition to preventing and managing diseases. The scientific study of yoga is expanding, and with it comes increased investigation into the therapeutic benefits of yoga. It has been suggested that practising yoga can alleviate feelings of stress and anxiety, boosts the body's autonomic functions by activating neurohormonal mechanisms and suppresses sympathetic activity, and is even beneficial to the physical health of cancer patients. Several studies have been conducted on this topic in recent years. The fact that yoga is gaining popularity all around the world is more evidence of India's expanding cultural impact.

**Keywords:** *Yoga, Pranayama*

### **Introduction**

The emancipation of the soul via attainment of perfection is the overarching purpose of each and every one of the canonical schools of Indian philosophy. Yoga is the approach that is taken. Swami Vivekananda. [1] Yoga is an ancient practise that aims to bring harmony and good health to the individual on several levels, including the physical, mental, emotional, and spiritual domains. It is a habit that has been widespread for a very long time in India and that is becoming increasingly common in Western society. The term "Yoga" refers to the process of uniting one's own unique consciousness with the Divine Consciousness of the universe when in a superconscious condition known as Samadhi. [1,2] Rigveda, the earliest book ever written by humans, makes reference to yogic meditation being practised by the wise, and Yajurveda encourages us to do yoga in order to improve our mental health, physical strength, and financial well-being. The Upanishads are full of yogic ideas and principles. In addition, the Bhagavad Gita contains a number of references to yoga-related concepts, such as pranayama and samadhi. Performing Raja yoga, which is a technique of focus to free soul or atma from the bondage of maya into paramatma, always requires a healthy body - "Sharirmadyam, khalu dharma sadhanam," as the ancient rishis of India put it. As a result, they came up with what is known as "Hatha yoga," which incorporates many practises such as asana, mudra, and pranayama. According to the "Gharanda samhita," there are 84 lakh asanas, of which 16 000 are considered to be the greatest, although only approximately 300 are widely practised today. "Hathayoga pradipika" again separates all asanas into four fundamental classes - sidhyasana, padmasana, sinhasana, and vadrasana. In addition, there are two other kinds of asanas: dhyanasana (a pose that maintains the spinal cord free and

changes the centre of gravity to another area of the body, such as the ribs), and shasthyasana (to get healthy body).

### **Significance of yoga**

Yoga derived from the Sanskrit root Yuj, which is to mean to yoke, join or attach, and it is considered as any 'practices' that help facilitate a union between self and the Divine. "There are four Yogas, viz., Karma Yoga, Bhakti Yoga, Raja Yoga and Jnana Yoga" (Sivananda, 1999) [5]. "Yoga is based on the philosophy that is practical and useful for our daily lives. Yoga constructs desirable physiological alterations and has sound scientific foundations" (Verma et al. 2015) [8]. It's important first to understand the characteristic of modern life to explain the significance of yoga in modern life. Soewondo (1996) [6], pointed out the characteristics of modern life in terms of work life, Eating style and family life in the following way. In terms of a busy life the people of the city have much work to do, as a result, they leave early in the morning and back home late, the time they have for rest is very short because they are driving in a very stressful traffic jam. The modern man involves not in a single activity but in diversities of activities for earning their life, and involve in strong business activities driven by technologies which makes the activities faster. In terms of eating style the modern men have no sufficient time to cook his own food, and hence he/she consume from fast food restaurants which lack nutritional diet. Family life, the family life is in most cases nuclear family type, and the time the father, the mother and children meet are very short, the role of both the mother and father play to fulfill the family demand is difficult and stressful. Above all, due to the competitiveness especially that of advertising agencies, the demand for children increased which is a headache for the parents to fulfill their demand. The change in the lifestyle of the individual has positive contribution for physical, mental and spiritual health. This requires behavioural adjustment and attitudinal change. The adjustment and change is a positive contribution to our health. Hence, Practising Yoga brings change in all walks of life. It is useful for creating emotionally, physically and mentally healthy citizens. From my practical experiences, I came to India from culturally different society, I came for my research work. And, hence the whole day I passed my time sitting in the library writing and reading. Sitting for prolonged periods in the library gradually make my life boring even if I did not test its impact on my metabolic health. It is obvious that sitting affects our body's processing of fats and sugars in ways that increase our risk of heart disease and diabetes. There is no doubt that sitting for most of the day may be as dangerous to health as other causes of disease. I also gradually susceptible to increased stress and depression. Then, I started attending evening yoga class in the University of Kerala. To reach my training center I almost travel around 10-15 km by bus for one trip and to come back to my living place took the same km. I demonstrated that the yoga class taught me a life lesson. I started doing different physical exercises. After completing the three months certificate program I am practicing the exercise in my small living room at least three days in a week, which improves my situations. The exercise of yoga without a doubt involve "discipline, willpower, determination, and great effort", and the experience of yoga happens unexpectedly (Farhi, 2005) [3].

### **What is Pranayama**

"Regulation of breath or the control of Prana is the halting of inhalation and exhalation, which comes after achieving that steady posture or seat," says the Tasmin sati svasaprasvasayor-gativicchedah pranayamah.

According to Patanjali's Yoga Sutras, this is how the term "Pranayama" should be interpreted. The word "svasa" refers to an inspiratory breath. Expiratory breath is what we mean when we say "Prasvasa." After you have achieved a level of stability in your asana practise, you are ready to move on to the practise of pranayama (seat). If you are able to sit in a single Asana for three hours straight without moving, you have achieved a high level of mastery over that Asana. Pranayama is a practise that may be started as soon as you are able to sit quietly for thirty minutes to even an hour. If you don't practise pranayama, it will be very difficult for you to achieve any spiritual growth at all. When it comes to the person, prana is equivalent to vyashti. Hiranyagarbha, also known as the floating "Golden-Egg," is said to be the storehouse of all of the cosmic energy, also known as cosmic Prana. Hiranyagarbha is Samashti Prana. Vyashti is equivalent to a single matchstick (single). The entire matchbox might be considered Samashti. Vyashti is a solitary mango tree by itself. Samashti owns the entire mango plantation in its entirety. Prana is the term used to refer to the body's energy. We are able to manage the Prana that is vibrating inside us if we are able to maintain control over the movements of the respiratory organs and lungs. Because the mind is attached to the Prana in the same way as the bird is attached to the string, the mind may be readily controlled by exercising control over the Prana. Just as the bird that is bound to a post by a string, after flying here and there, finds its resting place in the post, so too does this mind-bird, after running hither and thither in various sensual objects, find its resting place during deep sleep in the Prana. This is analogous to how the bird that is bound to a post by a string, after flying here and there, finds its resting place in the post.

### **Pranayama (According to the Gita)**

Apane juhvati pranam pranapanam tathapare; Pranapanagatee ruddhva pranayamaparayanah (Gita, Ch. IV-29.). Others restrict the flow of prana and apana during pranayama by offering the outgoing breath (prana) in the incoming breath (apana), and the ingoing breath (apana) in the departing breath (prana). Pranayama is a beautiful Yajna (sacrifice). Some people engage in breathing exercises known as Puraka. Pranayama (filling in). Some people engage in Rechaka Pranayama, which is a form of breath control (emptying). Some people engage in the Pranayama technique known as Kumbhaka, which involves restricting the flow of air outward via the nose and the mouth, as well as restricting the flow of air inward through the mouth and nostrils in the opposite way.

### **Pranayama (According To Sri Sankaracharya)**

"Pranayama is the control of all life-forces by realising that there is nothing but Brahman in all things as the mind, etc.," says a traditional Indian text. The expiration of life is analogous to the negation of the universe. The very concept that "I am Brahman" is what's known as the "incoming breath" in Hinduism. The holding back of one's breath represents the perseverance of that thinking afterward. This is the Pranayama that the knowledgeable do, as opposed to the pushing of the nose, which is solely for those who are ignorant. (Aparokshanubhuti, 118-120).

### **Pranayama (According to Yogi Bhusunda)**

Bhusunda tells Sri Vasishtha that "in the calm lotus of the heart within this visible tenement of flesh consisting of the five elements, there are two Vayus, namely Prana and Apana, commingled in it." Prana and Apana are the two vayus that are commingled in it. Those who walk the road of these two Vayus with ease

and without exerting any or even the least amount of effort will become the sun and the moon themselves in the heart—Akasa, and they will rove in the Akasa while still animating and carrying their fleshy-tabernacle. These Vayus will cycle between higher and lower states as they ascend and descend. They are of the same character regardless of whether one is awake, dreaming, or dreamless sleeping, and they can be found in all three states. As I go in the direction of those two Vayus, I have rendered all of my waking-state vasanas lit to those of the dreamless sleeping-state vasanas null, and I am travelling toward them. If you were to divide one thread of the lotus stalk into a thousand equal parts, you would discover that these Vayus are much more nuanced. As a result, it is challenging for me to provide a treatment on the nature of these Vayus and the vibrations they produce. Of these, Prana is the only one to continually vibrate in this body, but it does so in an upward direction, both outwardly and inwardly. Apana, on the other hand, has the same fluctuating propensity but causes vibrations in a downward direction both externally and internally to the body. It will be to everyone's advantage if the amount of Prana that is exhaled, measured in digits, is mirrored by the amount of Prana that is taken in. In a normal situation, just 12 numbers are breathed in. Those who have experienced what is referred to as "viz., the equalisation of Prana in exhale and inhalation" will take pleasure in an unending state of happiness. Now, let's talk about the qualities that Prana possesses. (The internal) Puraka refers to the inhalation of the Prana that has been expelled to the length of 12 digits, and it is the final stage of pranayama (inhalation). When Apana Vayu re-enters the body from the outside without any effort on the practitioner's part, this is also referred to as the internal (Puraka). When Apana Vayu stops manifesting itself and Prana becomes absorbed in the heart, the time that is spent in such a condition is known as Kumbha, which refers to the time spent within. Yogins are able to participate in all of these activities. It is called (the internal) Rechaka when the Prana in the Akasa of the heart presents itself outwardly (to the heart inside) in a variety of aspects without causing any affliction to the mind (exhalation). The term "external Puraka" refers to the point at which the outwardly fluctuating Prana enters the nose and comes to a halt there at the tip of the nose. However, while it is moving from the front of the nose to the back, it drops by 12 digits. Additionally, it is referred to as the Puraka that is exterior. When Prana is detained on the outside and Apana is arrested on the inside, this state is referred to as the external Kumbhaka. When the brilliant Apana Vayu makes an inward bend to the upward direction, this phenomenon is known as the external Rechaka. Moksha is the goal of all of these activities. Because of this, we ought to constantly contemplate them. Those who have a thorough understanding of all the outward and internal Kumbhakas as well as the others will not have to worry about being reincarnated again. "Each of the eight instructions, which I have already provided, has the potential to bring about moksha. They ought to be worked on during the day and the night. Those who consistently engage in these activities and maintain mental discipline by not allowing their thoughts to wander off in other directions will, in due order, reach the state of Nirvana. These practitioners will never feel the need to satisfy their craving for material pleasures.

They will always be engaging in their standard procedure, regardless of whether they are moving, stationary, awake, dreaming, or asleep.

After it has been expelled, prana will once more be ingested by the heart after it has completed a full cycle. In a similar manner, Apana will be absorbed in the heart after having first emanated from the heart and then returning all 12 digits to it. The passing of Apana, which is the moon, will cause the entire body to become cooler. But because Prana is the sun, it will cause the system to become hot, which will either fry the contents or digest them. Will one who has attained that greatest condition, when the kalas (rays) of Apana,

the moon, are obliterated by Prana, the sun? experience pain? When the kalas of Prana, the sun, are consumed by Apana, the moon, can one who has achieved that mighty seat have the opportunity for rebirth? When someone reaches that neutral condition, when they discover that Apana Vayu is being absorbed by Prana and vice versa, they will immediately put an end to their seven rebirths. I sing praises to that Chidatma, who is currently existing in that transitional stage in which Prana and Apana have merged into one another. I focus my constant meditation on that Chidatma, who resides in the Akasa, which is exactly in front of me, at the tip of my nose, at the point where Prana and Apana both go into oblivion. Because of this, the route of controlling Prana was the means by which I was able to achieve the pinnacle and perfect Tattva, which is free from all pain.

### **Control of Breath**

The first essential stage is to achieve complete mastery of the asanas, which can be translated as "control of the body." The next practise that you will do is called pranayama. In order to successfully perform pranayama, it is absolutely necessary to maintain the appropriate posture. Asana refers to a relaxed and pleasant posture. This position is the most effective since it allows you to remain comfortable for the longest amount of time. It is imperative that the chest, neck, and head are aligned in a single vertical line. It is not recommended that you bend your body either forwards or laterally, that is, either to the right or left side. You shouldn't sit in such an awkward position. It is imperative that you prevent the body from collapsing. You are not allowed to flex your body in either the forward or backward direction. The ability to master the position will present itself naturally after consistent practise of it. People who are overweight will have a tough time doing the Padma Asana, also known as the Lotus Pose. They might choose to sit in the pleasant Sukha Asana or the meditative Siddha Asana (perfected pose). You do not have to wait until you have complete control of the asanas before you start practising pranayama. You should do Asana, and in addition to that, you should practise Pranayama. You will eventually achieve mastery in both areas with the passage of time. Pranayama is something that may also be practised while sitting upright on a chair.

In the Bhagavad-Gita, often known as the "Immortal Song of Lord Krishna," there is a lovely description of the seat and attitude, which goes as follows: "He should practise Yoga for the purification of the Self in a pure secret place by himself established in a fixed seat of his own, neither too high nor too low, with cloth, black antelope-skin, and Kusa grass one over the other, there, making the mind one-pointed, with thought and the functions of the senses controlled, steady on his seat, he should hold the body, head, and neck erect, firm, gazing steadily at the tip of the nose without Pranayama refers to the practise of controlling one's prana as well as the body's essential energies. The management of the breath is what this refers to. This is the most crucial stage of the process. Pranayama is practised with the intention of gaining control of one's prana. The regulation of the breath is the first step of pranayama, which is practised to gain control over the life-currents or the inner vital energy. Pranayama can also be translated as "complete control of the life-currents by control of breath." The most obvious form that the gross Prana may take is in the form of breath.

Through consistent practise of Pranayama, one must first develop healthy breathing patterns in order to get the benefits of this ancient yoga technique. The breathing patterns of people who live in the real world are erratic. If you master Prana, you will have total command over all of the mental and physical energies in the universe. The Yogi is also able to exert control over the all-pervasive manifesting power, which is the source

from which all energies emerge. These energies include magnetism, electricity, gravitation, cohesion, nerve-currents, vital forces, and thought-vibrations. In short, the Yogi is able to influence the entirety of the universe's forces, both mental and physical. If one is able to master their breath, or Prana, they will also master their intellect. Whoever has mental mastery also has physical mastery over their breathing. If you get suspended for one, you automatically get suspended for the other. If one is able to exercise control over both their mind and their prana, they will be freed from the cycle of births and deaths and will achieve immortality.

There is a close relationship that exists between the mind, Prana, and the sperm. When one has control over the seminal energy, they also have power over their thoughts and their prana. Whoever has control over their seminal energy also has power over their prana and their thinking. Pranayama practitioners are known to have a high level of health, vigour and energy, as well as strong mental focus. Other benefits include a healthy appetite, a pleasant disposition, an attractive physique, good strength, courage, and enthusiasm. Even for those from Western cultures, pranayama may be a beneficial practise. The length of a Yogi's life is not determined by the number of years he has lived but rather by the number of breaths he has taken. Each time you take a breath, you have the potential to draw a certain quantity of energy, also known as prana, from the surrounding air. A man's vital capacity is measured by the greatest quantity of air that he is able to inhale after he has exhaled the maximum amount of air that is feasible. A minute is broken up into fifteen individual breaths for a guy. There are a total of 21,600 inhalations and exhalations that occur in a single day.

### **Varieties of Pranayama**

“Bahya-abhyantar-stambha-vritti-desaa-kala Sankhyabhih patidtishto deergha-sukshmah.”

### **Yoga Sutras—Chap. II, SA 50**

According to its three components—the exterior, the internal, and the steady—Pranayama can be thought of as either extensive or subtle. The retention processes are influenced by the restrictions of space, time, and number. The first type of Pranayama is called Rechaka, and it occurs when the exhalation is completed. The second phase, known as Puraka, occurs during the inhalation of the breath. The third type, known as Kumbhaka, is the one that occurs when it is suspended. Kumbhaka is the act of holding one's breath. Kumbhaka extends the amount of time one may live. It strengthens the inner spiritual energy, as well as the body's vigour and vitality. If you can hold your breath for one minute, you will get an additional minute of life expectancy as a result. Yogins can fight Yama, the Lord of Death, and gain mastery over death by directing their breath to the Brahmaraandhra at the very top of their heads and holding it there. Because he followed the Kumbhaka meditation and breathing techniques, Chang Dev lived for 1,400 years. Each of these motions in Pranayama—namely, Rechaka, Puraka, and Kumbhaka—is governed by space, time, and number, respectively. When referring to space, both the inside and exterior of the body, as well as a certain length or width, as well as the situation in which the prana is kept in a specific region of the body, are all included. It varies from person to person how far the exhaled breath travels once it leaves the body during the process of expiration. Additionally, the distance shifts when one is inspired. The duration of the breath varies according to the predominant Tattva that is present. According to the Tattvas—Prithvi, Apas, Tejas, Vayu, or Akasa—the duration of the breath is 12, 16, 4, 8, or 0 fingerbreadths, respectively (earth, water, fire, air or ether). Again, this is done on the outside during the exhalation phase, and on the inside during the inhalation

phase. The period of time that each of these things lasts is referred to as time, and it is often counted by Matra; one second is equal to one second. Matra signifies a measure. When we talk about time, we are also referring to the amount of time that the Prana should be held in a certain portion or centre. The term "number" indicates the total number of times the Pranayama is carried out.

The student of yoga should work their way up to doing eighty pranayamas in a single sitting. This should be done gradually. He should have four sittings, one in the morning, one in the afternoon, one in the evening, and one at midnight, or at 9 a.m., for a total of 320 pranayamas. Udghata, also known as the awakening of dormant Kundalini, is the result or fruit of practising pranayama. The primary purpose of pranayama is to combine prana with apana and then to gradually direct the combined pranayama upwards towards the head. This is known as the pranic union. The energy of Kundalini is said to be the origin of all occult powers. The length of time spent doing Pranayama determines whether or not it is a long or short Pranayama. In the same way that water that is poured onto a hot pan shrinks on both sides as it is being evaporated, air that is going in or out can be made to stop its activity by exerting a strong effort of restraint (Kumbhaka), which causes it to remain inside. According to Vachaspati, "the first try (Udghata) is measured by 36 matras, and it is rather moderate." That brings us to the second place, which is considered to be average. That brings us to the third, which is the most difficult level. This is the Pranayama practised according to the numbers. Within 12 angulas, or inches, of the end of the nose is the "place" where exhalation takes place. This is going to be determined by the use of a piece of cotton or reed. Inhalation can occur everywhere on the body, from the top of the head to the bottom of the feet. This will be determined by a sensation that is analogous to the feeling of being touched by an ant. Because the functions of the breath are able to be maintained at both the exterior and the interior sites of exhalation and inhalation, the place of Kumbhaka is comprised of both the external and the internal places of both exhalation and inhalation combined. This may be deduced from the fact that the two indicatives discussed before in relation to exhalation and inhalation are not present. There is no need that you must specify the three different sorts of breath rules, which are time, space, and number. This is entirely voluntary. They are not to be understood as to be practised collectively, as there are passages in many Smritis where the only specification mentioned with reference to the regulation of breath is that of time. This is because in many Smritis we meet with passages where the only specification mentioned is time.

The fourth is restraining the Prana by directing it to external or internal object; "Bahyabhyantara-vishayakshepi chaturthah"

Only up to the point where the first Udghata is indicated should the third type of Pranayama, which is described in Sutra 50 of the Yoga Sutras, be practised. This is the fourth Pranayama that is taken even farther. It entails securing the prana in each of the several lotuses (Padmas or Chakras) and moving it carefully, step by step, and stage by stage until it reaches the last lotus in the head, which is the location of complete Samadhi. This is a personal matter. When it comes to the exterior, it takes into account the length of the breath in line with the predominant Tattva. Either the inside or outside can be used to define prana. When the practitioner has achieved sufficient control over the first three types of Pranayama, the fourth kind is introduced. The third type of Pranayama does not take the sphere into consideration at all. The stopping of the breath happens with a single effort, and it is then measured by space, time, and number, and it is this measurement that determines whether it is dirgha (long) or sukshma (short) (subtle). On the other hand, the spheres of expiry and inspiration are determined in the fourth variant. After some time, all of the distinct

states will be mastered. In contrast to the third variation, the fourth one cannot be learned in its entirety with a single concentrated effort. On the other hand, as it is being done, it achieves several levels of perfection in a variety of ways. Once one level has been learned, one moves on to the next step and begins practising it. After that, it occurs one after the other. The third does not include any measures that came before it and is accomplished with a single effort. However, knowing the measures must come first in order to go on to the fourth step, which requires a lot of hard work to accomplish. This is the only point of distinction. This particular kind of Pranayama is subject to the same restrictions with regard to time, place, and number. At each successive stage of development, specific occult powers manifest themselves.

### **Three Types of Pranayama**

Pranayama can be broken down into three distinct categories: Adhama, Madhyama, and Uttama (inferior, middle and superior). The Adhama Pranayama lasts for a time period of 12 matras, the Madhyama Pranayama lasts for a time period of 24 matras, and the Uttama Pranayama lasts for a time period of 32 matras. This is for Puraka, so be ready. There is a proportion of one to four to two between Puraka, Kumbhaka, and Rechaka. Puraka is inhaling. Kumbhaka is retention. The word "rechaka" means "exhalation." In the event that you inhale for a duration of 12 matras, you will be required to do kumbhaka for a duration of 48 matras. In such case, the allotted time for Rechaka is 24 Matras. This is for the Adhama Pranayama breathing exercise. The similar guideline will be followed for the other two types of food. To begin, make Adhama Pranayama your primary focus for the next thirty days. After that, devote yourself to Madhyama for a period of three months. Then you should go for the Uttama variety. As soon as you are seated in the Asana, pay respect to both your Guru and Sri Ganesa. Abhyasa should be performed in the early morning at 4 a.m. or 10 a.m., in the evening at 4 p.m., and in the night at 10 p.m. or 12 p.m. As your skill level increases, you will be required to perform 320 pranayamas on a daily basis. This particular form of pranayama, known as Sagarbha Pranayama, is used in conjunction with the mental recitation of any mantra, either Gayatri or Om. It is straightforward and unattended with any Japa, but it is one hundred times more potent than the Agarbha Pranayama. The intensity of the practitioner's efforts is directly proportional to the level of Pranayama Siddhi achieved. An ardent and enthusiastic student, with Parama Utsaha, Sahasa, and Dridhata (zeal, cheerfulness, and tenacity), can effect Siddhi (perfection) within six months; whereas a happy-go-lucky practitioner with Tandri and Alasya (drowsiness and laziness), will find no improvement even after eight or ten years of practise. Plod on. Continue doing what you are doing while maintaining patience, faith, confidence, expectancy, interest, and attention. You can't help but achieve your goals. Nil desperandum—Never despair.

### **The Vedantic Kumbhaka**

Pranayama is a practise that should be done when one is free from distractions and has one's mind at ease. It is necessary to put a halt to both inspiration and expiry. The practitioner should have no other reliance but on Brahman; doing this should be their top priority in life. Rechaka is sometimes defined as the act of relinquishing all outward possessions. Puraka is described as the act of assimilating the spiritual wisdom contained in Sastras, whereas Kumbhaka refers to the practise of hoarding such information for one's own use. He is a free and independent individual who practises his Chitta in this manner. It can't be denied under any circumstances. It is only by Kumbhaka that the mind should ever be taken up, and it is only through

Kumbhaka that it should be filled up from within. Only through practising Kumbhaka can one hope to acquire a solid mastery of that technique. "Parama Siva" may be found inside of it. In the beginning of his Brahmagranthi, a hole or tunnel will appear in a short amount of time. Then, after he has pierced Brahmagranthi, he pierces Vishnugranthi, and once he has pierced Rudragranthi, the Yogin attains his emancipation by the religious rites, which he has conducted in numerous lifetimes, with the assistance of Gurus and Devatas, as well as through the practise of Yoga.

### **Pranayama for Nadi-Suddhi**

If the Nadis are clogged with pollutants, the Vayu will be unable to enter them. Therefore, the first thing that should be done is to purify them, and after that they should practise pranayama. Samanu and Nirmanu are the two methods that are utilised in order to cleanse the Nadis. The Samanu is accomplished by the use of the Bija Mantra in a mental process. The Nirmanu can be accomplished by either bodily cleaning or through the Shatkarmas.

1. Sit on Padmasana. Meditate on the Bijakshara of Vayu y:ö (Yam) which is of smoke colour. Inhale through the left nostril. Repeat the Bijakshara 16 times. This is Puraka. Retain the breath till you repeat the Bija 64 times. This is Kumbhaka. Then exhale through the right nostril very very slowly till you repeat the Bijakshara 32 times.
2. The navel is the seat of Agnitattva. Meditate on this Agnitattva. Then draw the breath through the right nostril repeating 16 times the Agni Bija rö(Ram). Retain the breath, till you count the Bija 64 times. Then exhale slowly through the left nostril till you repeat mentally the Bija letter 32 times.
3. Fix the gaze at the tip of the nose. Inhale through the left nostril repeating the Bija Yö (Tham) 16 times. Retain the breath till you repeat the Bija (Tham) 64 times. Now imagine that the nectar that flows from the moon, runs through all the vessels of the body and purifies them. Then exhale slowly through right nostril till you repeat the Prithvi Bija l:ö(Lam) 32 times.

The Nadis are purified nicely by the practice of the above three kinds of Pranayama by sitting firmly in your usual posture.

### **Mantra during Pranayama**

The Isvara Gita contains the following instruction regarding the recitation of the Mantra during the practise of Pranayama: "When the aspirant holding his breath repeats the Gayatri thrice, together with even Vyahritis in the beginning, the Siras at the end, and the Pranava, one at both ends of it, this is, what is called the regulation of breath." On the other hand, Yogi Yajnavalkya is quoted as saying the following: "The upward breath and the descending breath, having been restrained, management of breath is to be practised by means of the Pranava!" Keeping in mind that the length of the mantra is measured in syllables This only repeat of the Pranava is intended for those who have attained the status of Paramahamsa Sannyasin. It is said in the Smritis that regular contemplation should be performed by inhaling and going through the various phases of breath control at one's navel, heart, and forehead. This is done in regard to the different forms of Brahma, Vishnu, and Siva. Brahman, on the other hand, is the only thing that the Paramahamsa is allowed to focus their attention on as an object of contemplation. According to the Sruti, "the self-controlled ascetic is to meditate upon the absolute Brahman, by means of the Pranava."

## Importance and Benefits of Pranayama

"The illusory Samsaric Vasana that has evolved through the practise of many incarnations never perishes unless via the practise of Yoga for a long time," it says in the sutra. "The practise of yoga for a long time." It is not feasible for an individual to exert control over their thoughts by repeatedly sitting up in a chair, unless they are using one of the permitted methods (Muktikopanishad). "Without Yoga, how could Jnana, which has the power to bestow Moksha, emerge with absolute certainty? If one does not possess Jnana, then yoga will not be able to bring about the state of moksha (liberation). Therefore, the seeker, after attaining liberation, should practise both yoga and jnana (rigorously)" (Yogatattva Upanishad). According to Yoga Sutras II-52, "Tatah kshiyate prakasavaranam" translates to "Therefore the covering of the light is dissolved." Tamas and Rajas combine to form the covering, also known as the veil. Down the practise of Pranayama, this barrier can be broken through. Following the lifting of the veil, the true character of the soul will become apparent. Chitta is made up of sattvic particles by itself, but it is surrounded by rajas and tamas, much as fire is surrounded by smoke. These other two doshas are known as Rajas and Tamas. Pranayama is unequalled as a method of purification by any other practise. Purification is achieved by pranayama, and the light of understanding is brought to the practitioner. When a yogi does pranayama, his Karma, which conceals his discriminatory knowledge, is wiped away as a result of the practise. The essence, which is light according to nature, is obscured by the magical panorama of desire, and the Jiva, also known as the individual soul, is driven towards vice.

The Yogi's Karma, which obscures the Light and chains him to an endless cycle of rebirths, is weakened in each and every moment by the practise of Pranayama, and it is finally eradicated entirely by this activity. According to Vachaspati, the cover is made up of one's sorrows as well as their faults. According to Manu's teachings, we should "let the flaws be burned out through pranayama." In the Vishnu Purana, Pranayama is described as an accessory to the practise of yoga. The text states, "He who seeks the air known as Prana by practise is said to have obtained Pranayama." "Dharanasu cha योग्याता मानसाह," which translates to "The mind gets fit for focus" (Yoga Sutras, II-53). After this light-veil obstruction has been taken care of, you will find that it is much easier to concentrate your attention. After the disruptive energy has been eliminated, the mind will become quite stable, much like a flame that is situated in an area where there is no wind. When referring to the inhalation, retention, and expiration of breath, the term "Pranayama" is sometimes used together, and other times it is used when referring to each of these individually. When the Prana Vayu travels into the Akasa-Tattva, there will be a reduction in the amount of breath taken in. At this point, it will not be difficult to hold one's breath. Pranayama will have the effect of gradually slowing down the speed of the mind. Vairagya will be brought about as a result. If you are able to hold your breath for one inch or digit on the inside of your body, you will obtain the power of foretelling. If you are able to hold your breath for two inches on the inside of your body, you will obtain the power of thought-reading. If you are able to hold your breath for three inches on the inside of your body, you will obtain the power of levitation. If you are able to hold your breath for four inches on the inside of your body, you will obtain When a Yogi has achieved the level of mastery that allows him to execute Kumbhaka for a full three hours, only then will he be able to balance himself on his thumb. He unquestionably reaches the pinnacle of Siddhis in every possible form. Pranayama, like fire, is effective in destroying fuel; similarly, it is effective at destroying sinful bundles. Pratyahara is a technique that helps to relax the mind. Dharana has the effect of calming the mind. The state

of dhyana causes one to forget both their body and the outside world. Samadhi is the state that brings about unending bliss, as well as knowledge, liberation, and tranquilly.

The flame of the Yogagni, also known as the "fire of yoga," which extends from the navel to the head melts the Amrita that is stored in the Brahmarandhra during Yogic Samadhi. This brings great happiness and bliss to the Yogi when he consumes it. By only consuming this yogic nectar, he is able to go without eating or drinking for an indefinite amount of time. The body slims down while simultaneously gaining strength and health. There is a significant reduction in fat. The face has a certain radiance about it. Eyes glitter like a diamond. The practitioner matures into an extremely attractive person. Voice develops a sugary and melodic quality. The noises of the inner Anahata may be heard very clearly. The pupil does not suffer from any kind of sickness whatsoever. He becomes well-known in the Brahmacharya community. The sperm becomes more solid and consistent. The Jatharagni, also known as the stomach fire, is increased. When the learner has reached such a level of perfection via the practise of brahmacharya, his mind is unaffected even if a fairy attempts to embrace him. Appetite gets intense. Nadis are made more pristine. When the Vikshepa is gone, the mind becomes more focused on a single goal. Both Rajas and Tamas have been eradicated. The mind is now ready for the meditation practises of dharana and dhyana. The amount of waste being expelled decreases. A consistent practise will bring about an inner spiritual light, as well as happiness and mental tranquilly. It elevates him to the status of an Urdhvareto-Yogi. All of the other siddhis that were stated earlier are only available to advanced pupils.

## Conclusion

In terms of its genuine essence, including its efficacy, outcomes, and applications, yoga may be considered a science that is shared by all of mankind. It is possible for each of us to get satisfaction from it in a manner that is unique to us, and this may occur without any negative side effects or obsessed notions. There are three components to yoga: the objective body, the subjective mind, and the consciousness that arises from practising yoga. In point of fact, these are not three distinct dimensions; rather, they constitute three aspects of the same overarching science. It is the only science that has a message for the body, the mind, and the awareness, and all three of these things operate together without the need for a bell to be rung. The majority of the time, integral components of yoga practises produce these effects through an operation mechanism known as mind-body consciousness, despite the fact that the result is only signified as physiological alterations. A researcher will only be able to explain the scientific principles that are functioning behind the many different impacts of yogic practises if they have a solid comprehension of the psychological phenomena being studied. The ultimate purpose and goal of yogic sciences is not only to promote optimum levels of bodily and mental health in a person who practises it, but also to raise that person's degree of unconsciousness. It is possible that the method or mechanism for achieving such goals is plain, but there is one thing that is abundantly obvious: in order to achieve such goals, an individual has to simultaneously grasp, follow, and nurture both the body and the mind. The psychology of yoga has its own significance when seen in this light. Documentation in terms of contemporary physiology and psychology is required for its fundamental concepts. In point of fact, this is what the world needs right now.

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