

Alternate nostril breathing (Nadi shodhan): Importance and effects

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KEYWORDS	ABSTRACT
Alternate nostril	The breathing exercise plays an important role in yoga sciences. The alternate nostril breathing is a preparation practice before the pranayama. To maintain the
breathing, nadi , conscious and	inhalation and exhalation ratio, various methods are mentioned by the practitioners. This practice is also called as nadi shuddhi or anulom vilom. Some questions may
unconscious, prana.	here be raised that how alternate nostril breathing is different from pranayam? How the subtle channels gets purified? How the breathing technique effects the
	pranamaya and the annamaya koshas? This paper attempts to study ANB, its effect on sympathetic and parasympathetic system physiologically.

Introduction

Breathing is the most common thing that we perform consciously or unconsciously from birth to death but most of us are unaware of its importance. The significant things are described by the Vedas and Upanishads but the studies were not taken into consideration due to flourishing scientific theories. The modern medicine took a vast role in the time that people forgot the ancient traditions, studies, medicine and philosophies. Yoga works as a subtle science by opening up the subtle channels and increasing the flow of prana or vital energy. It works on theory that if a disease is caused in a body there must be a blockage of the channels, 'nadi'. The ANB therefore works on activation of the sympathetic and parasympathetic nervous system and thereafter clearing up the amount of CO2 present in the body.

Alternate Nostril Breathing, or Nadi Shodhan, is a traditional yogic practice with deep roots in ancient Indian philosophy and medicine. It involves the rhythmic inhalation and exhalation through alternating nostrils, which is believed to balance the body's energy systems, calm the mind, and promote overall well-being. This paper explores the significance of Nadi Shodhan, its physiological and psychological effects, and its relevance in modern wellness practices.

It is found that half of the disease in the present scenario are psychosomatic, that firstly effect our psyche and then our soma (body). One can work in body through medicines but the effect on psyche can be only possible through pranayama.

Historical Background

Nadi Shodhan has its origins in the ancient texts of yoga, particularly in the Pranayama section of the "Hatha Yoga Pradipika" and the "Gheranda Samhita." In these texts, it is described as a technique to cleanse the nadis (energy channels) in the body, thereby improving physical health and mental clarity. The practice is rooted in the concept of Prana (vital life force) and its flow through the body's energy channels.

Physiology of breathing

Breathing is a fundamental function of the body, as all other bodily processes depend on it. The respiratory system plays a crucial role in facilitating the intake of oxygen and the expulsion of carbon dioxide. Air enters through the nostrils and travels through the throat, bronchi, and bronchioles, eventually reaching the alveoli, which are tiny air sacs in the lungs. Here, oxygen



diffuses through the thin walls of the alveoli into the blood, while carbon dioxide and other waste products are transferred from the blood into the alveoli to be exhaled. Oxygen binds to hemoglobin in the blood and is then transported to cells and tissues throughout the body, where it supports cellular functions and energy production.

Therefore, the blood of one who breathes improper is bluish, dark, lacking the rich redness of arterial blood.

Understanding subtle physiology reveals that prana, or vital energy, serves as a fundamental form of energy within the body. This energy flows through subtle channels known as nadis. While prana is present in the air we breathe, it also permeates areas where air cannot reach. Oxygen from the air is absorbed by the blood and utilized by the circulatory system. Similarly, prana from the air is absorbed by the nervous system and contributes to its functioning. Just as oxygenated blood nourishes and revitalizes every part of the body, prana is distributed throughout the nervous system, enhancing its strength and vitality.

Technique and Methodology

The practice of Nadi Shodhan involves the following steps:

- 1. **Preparation**: Sit in a comfortable and upright posture, such as Sukhasana (easy pose) or Padmasana (lotus pose). Ensure that the spine is straight and the body is relaxed.
- 2. **Hand Position**: Use the right hand to perform the technique. The thumb is used to close the right nostril, and the ring finger is used to close the left nostril. The index and middle fingers can be placed on the forehead or used to create a gentle mudra (gesture).
- 3. **Breathing Pattern**: Begin by closing the right nostril with the thumb and inhaling deeply through the left nostril. After inhaling, close the left nostril with the ring finger and release the thumb to exhale through the right nostril. Next, inhale through the right nostril, close it with the thumb, and exhale through the left nostril. This constitutes one complete cycle.
- 4. **Duration**: Practice Nadi Shodhan for a set duration, usually between 5 to 15 minutes, gradually increasing as comfort and proficiency grow.

Alternate nostril breathing (nadi shodhana)

The human respiratory system is designed to allow breathing through either the mouth or the nostrils. The method chosen can significantly impact health, as nasal breathing generally promotes better health and vitality, while mouth breathing may be associated with various health issues and weaknesses. Nasal breathing is particularly effective when practiced with conscious awareness of the body's needs and responses.

The alternate nostril breathing is performed to activate the right and left nostril, surya and chandra nadi,,thus activating sushumna and bringing a definite balance between the sympathetic and parasympathetic nervous system. This is also referred as the aim of hatha yoga.

"हकारः कथितः सूर्य ठकारः चंद्र उच्यते सूर्य चंद्रमसौरयोगत हठयोग निघाध्यते" ॥

The alternate nostril breathing is simply, the inhalation through the active nostril and exhalation through the other, this repeating the process. But the things must keep in mind are: - the awareness, no shallowness and jerks, and no pause if the body is not healthy.

Swami Rama gives three basic techniques for ANB: -

- -Exhalation through active nostril -inhale through same -close off the nostril and then exhale from the other. Repeat this alteration three times so you breathe complete cycle through each nostril for a total of six breath. And the other three breath with both the nostrils.
- The second involves exhalation through one side with inhalation through the other.



- The third involves inhalation and exhalation from one nostril (3 breath),3 breath from other and the other three from both the nostrils.

(The Swami Rama teachings do not follow pause and focuses more on exhalation). (ref:-Science of breath, Swami Rama).

The traditional texts mention the word nadi shodhan for this practice.

"बद्ध-पद्मासनो योगी पराणं छन्द्रेण पूरयेत |धारियत्वा यथा-शक्ति भूयः सूर्येण रेछयेत" ॥ ७ ॥ "पराणं सूर्येण छाकृष्ह्य पूरयेदुदरं शनैः |विधिवत्कुम्भकं कृत्वा पुनश्छन्द्रेण रेछयेत "॥ ८ ॥

In the Padmâsana (Lotus Pose), the practitioner should begin by inhaling through the left nostril while closing the right nostril. After holding the breath for a comfortable duration, the air should be slowly exhaled through the right nostril. Subsequently, the practitioner should inhale through the right nostril, allowing the breath to fill the belly, and then, after holding the breath again, exhale slowly through the left nostril. This practice is described in the classical yoga text *Hatha Yoga Pradipika* by Swami Muktibodhananda and is often referenced in contemporary yoga guides and teachings (Hatha Yoga Pradipika, Swami Muktibodhananda; G.S. Sahay).

Misconception: - Nadi shodhan is often understood as a pranayam but is a purificatory prepractice to purify the subtle channels of body .'Svatmarama states that in order to attain the capacity of retaining the air (prana vayu) it is necessary that nadi are purified. Thus the presentation of hatha yoga pradipika suggests that eight kumbhakas can be practiced only after sufficient practice of nadi shodhan.

Importance of Nadi Shodhan

Nadi Shodhan is considered important for several reasons:

- 1. **Balancing the Energies**: According to yogic philosophy, the body contains two main energy channels: Ida (left nostril) and Pingala (right nostril). Ida is associated with the lunar, cooling energy, while Pingala is linked to the solar, heating energy. Nadi Shodhan helps to balance these energies, promoting harmony and well-being.
- 2. **Enhancing Respiratory Function**: By engaging in controlled breathing, Nadi Shodhan improves lung capacity and strengthens the respiratory system. This can lead to better oxygenation of the blood and improved overall health.
- 3. **Mental Clarity and Focus**: The practice aids in calming the mind and reducing mental stress. The rhythmic nature of the breathing helps to improve concentration, mental clarity, and emotional stability.
- 4. **Detoxification and Immune Support**: Regular practice of Nadi Shodhan is believed to support the body's natural detoxification processes and enhance immune function by improving circulation and reducing stress.

Effects of ANB

• Link Between Brain Hemispheres and Nadis: The functions of the brain are closely related to the activities of the Ida and Pingala nadis. The brain is divided into two hemispheres: the right and the left. Each hemisphere controls the opposite side of the body— the right hemisphere manages the left side, and the left hemisphere controls the right side. Ida is associated with the right hemisphere, which processes information in a holistic and intuitive manner, focusing on spatial orientation and sensitivity to vibrations. In contrast, Pingala corresponds with the left hemisphere, which handles information in a sequential, logical way and is involved in rational, analytical, and mathematical tasks.



Thus, the interplay between the nadis and the brain's hemispheres influences and shapes our daily responses and behaviors.

- Directing the circulation is the major factor of breathing. The nostril are related to the nervous system and thus they send enough oxygen to the cells, by taking awareness to particular part.
- Acquiring mental and physical qualities.
- Controlling the emotions has been the most major factor found in people after practicing the ANB.

The brain stimulation works in the ANB practice, working in physical body and thus too effecting the subtle kosha (sheaths), vayu and energy channels.

Relevance in Modern Wellness Practices

In contemporary times, Nadi Shodhan is recognized for its benefits beyond traditional yoga practice. It has found a place in modern wellness and self-care routines due to its holistic approach to health. The practice is often incorporated into stress management programs, mindfulness training, and holistic therapies.

Scientific Research and Evidence

Recent studies have explored the physiological and psychological effects of Nadi Shodhan. Research has shown that regular practice can lead to significant improvements in stress levels, respiratory function, and overall well-being. However, more rigorous and large-scale studies are needed to fully understand the extent of its benefits and mechanisms.

Conclusion

When we differentiate exercise and yoga, the major difference is the breathing and the awareness. The yoga science works wholly in the mechanism of breathing. It plays an important role in the body. A diseased body can be found with the obstruction of prana. Therefore the yoga science works on subtle levels. This obstruction of prana is then cured through the breathing practices. The ANB or,nadishodhanam,or anulom-vilom is the most effective practice that can be performed by any individual. The research datas that have been collected shows that it has been very helpful majorly in brain stimulation. The nostril activation effects the vagus nerve ,that is connected to our nervous system. The right and left nostril both work in different aspects and there activation at definite ratio can be understood as healthy.

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