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NADISHODHAN PRANAYAM AND ITS SIGNIFICANCE IN PHYSIOLOGY OF RESPIRATORY SYSTEM

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ABSTRACT

Pranayama is one of the important Yogic procedures which help to clean respiratory and circulatory system of body. Similarly, Nadishodhan Pranayam purifies Pranic channels (Nadis). Nadishodhan Pranayam involves alternating inhalation and exhalation between the right and left nostrils. This procedure affects Pingala nadis, balances physical and mental harmony and restores equilibrium of respiratory systems. This procedure boosts up Pranic energies and prevents many physical as well as mental disorders. Nadishodhan Pranayam vitalizes Shakti in Mooladhara chakra and directs it through the Sushumna which results states of meditation to impart physical as well as mental relaxation. Nadishodhan Pranayam helps to opens lungs capillaries, infuses the body with oxygen and helps to alleviate respiratory irritants thus provides physiological support to the respiratory system. Present article emphasizes Nadishodhan Pranayam and its significance in the physiology of respiratory system.

KEYWORDS: Ayurveda, Nadishodhan, Pranayama, Respiratory, Lungs.

INTRODUCTION

Nadi shodhana is a Pranayama practice in which breath is deliberately and genuinely controlled to upgrade the progression of air through the nostrils as a strategy to adjust the energy of the body and the psyche. Nadi shodhana with the two nostrils influences the sensory system, which permits the body and the brain to adjust and become focused. This practice relaxes mind and prevent mental uneasiness or stress. Nadi Shodhana at sunrise; makes a smooth stream and the terms of the breath are reached out until the breath turns out to be light and unpretentious with the air drifting through the nostrils. Even though it is normal for one nostril to be dominant for some time, allowing the air to move more freely in that nostril, the restricted flow of air through the

nostrils is a measurable sign of an energy imbalance in the body. When the nostrils are streaming equitably, it prompts a peaceful and quiet mind with optimum state of physiological balance.^[1-5]

Practice of nadi shodhana pranayama

Like most *Pranayamas*, *Nadi shodhana Pranayama* is performed in best way without food, the early morning is an optimal time for the same. One should sit comfortably with the support of feet on the floor or cross-legged on the floor. Spine should remain extended while neck and head should remain in erected position throughout the procedure. The major steps of *Nadi Shodhana Pranayama* are depicted in **Figure 1**.

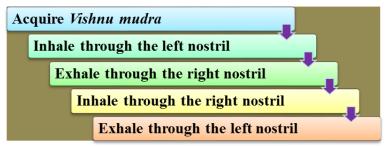


Figure 1: Major steps of nadi shodhana pranayama.

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Major steps of nadi shodhana pranayama

1. Vishnu mudra

One should track down *Vishnu mudra*; in this step tip of index and middle fingers remain inward so they touch palm of right thumb. Alternate uses of thumb and pinky fingers recommended closing the left nostril and right nostril.

2. Inhale through the left nostril

One should breathe through the left nostril by closing right nostril with right thumb. Exhale fully through the left nostril with gentleness, one should inhale deeply through the belly from left nostril keeping right nostril closed.

3. Exhale form the right nostril

Finger utilizes to close the left nostril delicately and exhalation done from the right nostril.

4. Inhale through the right nostril

Inhale from the right nostril, keeping close the left nostril; this process permitting breath to go up to the right half of body.

5. Exhale form the left nostril

In this step left nostril is used to exhale, keeping close the right nostril with thumb, this step giving up breath back down to the left half of body. One should become equipped with own breath. It is essential to take a full inward breath then delicate exhalation.

Physiological significance

The dual functions of the right and left hemispheres of the brain are intimately linked to the normal flow of breath through each nostril. There are cycles in which the strength of the breath in the left and right nostrils alternate, but in between those cycles is a state of balance flow, when all systems are in balance and the *Atma Shakti* is awakened. ^[6-8]

Nadi Shodhana Pranayama also called substitute nostril breathing, which is a strong breathing practice with wide-range of benefits. Nadi is a Sanskrit word signifying "channel" and Shodhana signifies "purging." Therefore, the primary objective of Nadi Shodhana Pranayama is to restore equilibrium to the system as a whole while simultaneously clearing and purifying the subtle channels of the mind-body organism through the control process of respiration. [7-9]

Physiological significance in the functioning of respiratory $system^{[10-12]}$

- ✓ Nadi Shodhana Pranayama correct the rhythm of heart rate
- ✓ Nadi Shodhana Pranayama dilates lungs capillary
- ✓ Increase process of gas diffusion or exchange thus improves purification through the respiration
- ✓ Opens the lungs by virtue of its stimulatory action
- ✓ This helps in the detoxification by enhancing exhalation of carbon dioxide
- ✓ The allergic condition or respiratory distress can be relieved significantly with the help of *Nadi Shodhana Pranayama* since this process improves functional capacity of respiratory system.

- ✓ Clears obstruction of *Srotas* and removes morbidity by the mechanism of purification.
- Infuses the body with oxygen and maintain supply of gases.
- Balances respiratory channels
- ✓ Alleviate respiratory irritation
- Establish balances between left and right hemispheres of the brain

Other health benefits of nadi shodhana pranayama

- It stimulates metabolism, reduces Lethargy and Apathy
- ♣ Increases energy, alertness and mental coordination
- ♣ Dilates pupils and lowers the heart rate
- **♣** Improves process of digestion
- ♣ Provides mental and physical relaxation
- Suppress mental Stress and Anxiety
- ♣ Rejuvenates nervous System and Calms the mind
- **♣** Regulates hormonal balances
- ♣ Helps to balances Lunar and Masculine energies

Cautions

- One should not breaths forcefully or breaks breathe forcefully.
- **...** There should be gentle flow of breathe.
- One should not breathe from the mouth.
- One should place fingers very lightly on the nose to stop nostril.

Indications for nadi shodhana pranayama

- This technique is considered useful in case of Vata imbalance and low level of Prana.
- Nadi Shodhana Pranayama offers relieves in nervous system disorders.
- > This technique helps to control anxiety, anger and depression, etc.
- > This technique cures poor memory and provides focus concentration.
- Relieves mental fatigue and exhaustion, restless, headaches and migraines
- Considered good for insomnia.
- Helps to relieve respiratory distress and asthma, etc.

CONCLUSION

Alternate breathing, also known as *Nadi Shodhana Pranayama*, which is an effective method for purifying the subtle channels known; *Nadis*, through which the life force (*Prana*) flows freely. An individual's mental, physical, and spiritual aspects are all bolstered by this technique. Physiological it support respiratory system by correcting the rhythm of heart rate, dilates lungs capillary for the process of respiration, increase gas diffusion, improves purification by relieving morbid gases, helps to relieves obstruction of respiratory channels and prevents allergic or respiratory distress. *Nadi Shodhana Pranayama* infuses the body with oxygen and also alleviates symptoms of respiratory irritation. This technique considered useful for enhancing functional capacity of respiratory system and lungs.

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