

**EFFECT OF PRANAYAMA ON STRESS****Adithya T.\*<sup>1</sup> and Raviprasad Hegde<sup>2</sup>**<sup>1</sup>Dept. of P.G Studies in Swasthavritta and Yoga.<sup>2</sup>Alva's Ayurveda Medical College, Moodbidri, Karnataka, India.Article Received on  
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**\*Corresponding Author****Dr. Adithya T.**Dept. of P.G Studies in  
Swasthavritta and Yoga.**ABSTRACT**

Pranayama is very helpful for people in maintaining good physical and mental health. Inspiration, expiration, and retention of breath can all be controlled with the aid of pranayama. Breathing methods and patterns are frequently recommended for unwinding, managing stress, and controlling physiological states. The autonomic nervous system can be dramatically influenced by breathing patterns and techniques which may increase or decrease symptoms.

**KEYWORDS:** Pranayama, Stress, Yoga, Effect.**1. INTRODUCTION**

Yoga is a practise that has been practiced for ages and was created to help people with their physical, mental, emotional, and spiritual well-being. It has been a long-standing custom in India and is currently gaining popularity in Western culture. In a super conscious condition known as Samadhi, "yoga" refers to the unification of our consciousness with the Universal Divine Consciousness. Yoga is referred as "the means or strategies for transforming consciousness and obtaining liberation (moksha) from karma and reincarnation (samsara)" in Indian culture. The Sanskrit term for yoga means "joining". Yoga was first practised in India around 3000 B.C. It is covered in the Bhagavad Gita and Mahabharata. Patanjali (300–200 B.C.) codified yoga in to Yoga Sutras. The goal of yoga, according to Patanjali, is to know the true "Self" (God), and he provided an eight-step process for doing so.

**Meaning of Pranayam**

The term "pranayama" is made up of two words: "pra," which means "to fill," and "an," which means "to breathe or to live," giving rise to the new meaning of "life that fills with breath." The control of breathing is pranayama. Prana is the body's bioenergy, also known as breath. On subtle levels, "ayama" denotes control, while "prana" refers to the pranic energy

that gives life or "life force." Pranayama is "Control of Breath,". With the help of pranayama, one can obtain a healthy mind and body by regulating the pranic energy's cycles.

In other words, the soul (Atma) is ultimately tied to that eternal divine power known as Paramatma "God," just as the prana is related to the mind, the mind is related to the brain, and the brain is related to the soul (Atma).

According to yogic theory, pranayama is essentially a series of exercises meant to increase the amount of oxygen in the blood and the brain. It controls healthy thought and desire functioning in addition to automating blood flow. The prana flow is impeded by the barrier, which is removed by performing asanas. It bestows poise and incredible willpower.

### **Objective of Pranayama**

The purpose of pranayama is to awaken, connect with, manage, and to control the essential life force that resides within the body.

### **Importance of Pranayama**

Pranayama aids in the prevention of numerous ailments. Additionally, pranayama is essential for our survival because it is a key way for our body to get the oxygen. Asanas combined with pranayama increases internal heat. The practise of pranayama uses a variety of techniques to deliberately, rhythmically, and intensely move and expand the breathing system. It is made up of a slow, delicate flow of long-lasting inhalations (Puraka), exhalations (Rechaka), and breath holding (Kumbhaka). The body's systems are stimulated by puraka, detoxified air and toxins are expelled by Rechaka, and energy is distributed throughout the body by Kumbhaka. The lungs and rib cage move in three directions: horizontally (Dairghya), vertically (Aroha), and circumferentially (Visalata).

### **Type of Pranayama**

- Sheetali Pranayama
- Sheetkari Pranayama
- Ujjayi Pranayama
- NadiShodhan Pranayama
- Bhastrika Pranayama
- Bhramari Pranayama
- Kapalbhathi Pranayama

- Anulom Vilom Pranayama

### Benefits of Pranayam

- 1) Pranayama control ageing.
- 2) Pranayama makes oxygen circulation smooth, helps in weight regulation by melting fat as more oxygen burns more fat.
- 3) Pranayama is the key of Intelligence.
- 4) It provides lightness to the body, acts as diseases destructor, brings vigour and power.
- 5) Pranayama helps in lungs expansion.
- 6) It also helps in contending blood pressure and heart diseases.
- 7) It cures the phlegm, mucus and tonsillitis. Makes your gums and teeth healthy.
- 8) Pranayama brings stillness and calmness to the mind, increases concentration and stability of mind. Pranayama is good for physical, mental and spiritual happiness.
- 9) It makes you free from constipation and indigestion problems.
- 10) Pranayama stimulates autonomic nervous system, sympathetic nervous system and parasympathetic nervous systems thereby eases depression, dullness and lethargy.

### Mechanisms Pranayama on Stress

The autonomic nervous system, which regulates the sympathetic (stress or "fight-or-flight") and parasympathetic (rest-and-relax") responses in the body, as well as the actions and reactions of the body's systems, including the cardiovascular, respiratory, and digestive systems, is responsible for this relationship. The vagus nerve, which is essential for the neurological system's reaction, is directly impacted by the breathing rate. The sympathetic nervous system is activated during the stress reaction, putting us into survival mode with all the accompanying physical and mental states: the heart rate rises to send more blood rushing to the muscles; the muscles tense in anticipation; and the production of stress hormones rises. However, by utilising behavioural techniques like meditation and calm breathing, individuals have the capacity to start the opposite reaction. The physiological changes we observe when the relaxation response is engaged are essentially the opposite of those of the stress response.

### Supportive study

The impact of right unilateral nostril breathing (UNB) on several measures of attention, language, spatial ability, depression, and anxiety in post-stroke persons with and without aphasia was examined in a 2013 study published in the Journal of Alternative and Complementary Medicine. Individuals in both groups experienced significantly lower levels

of anxiety after receiving right UNB. The aphasic individuals showed improved performance on language tests. According to the yogic physiology outlined for the so-called alternate nostril breathing technique, breathing through one nostril has particular effects on psychophysiology that are nostril-dependent, with right-nostril breathing leading to activating, stimulating functioning and breathing through the left nostril leading to calming, restorative functioning.

### **Process of Pranayama**

Pranayama is the act of inhaling Pranashakti (Energy connected to Prana) and breathing it out. By managing breathing, one can accomplish this Pranashakti. The human body performs some tasks that are both voluntary and involuntary. Similar to the act of breathing, thinking and feeling are both deliberate and involuntary processes. The breath is produced by lung movement, and lung movement is caused by prana. The muscles and nerves that regulate breathing can be consciously controlled by diligent practise. Thus, pranayama refers to the control of the energy or force that regulates the breath rather than the management of the breath itself.

### **PRANAYAMAS**

Vertical breathing is encouraged by the pranayamas Anulom-viloma (alternate nostrils), Ujjayi, Sheetal, and Sheetkari. All forms of pranayama should be performed as slowly and profoundly as possible. When we breathe in, the lungs expand significantly and the alveolar walls are stretched to their utmost extent. As a result, the upper pulmonary part's alveoli are entirely filled with air. The gaseous exchange benefits from this and continues to function effectively throughout the day. The exhalatory force is lessened and the air is allowed to leave slowly when we breathe out slowly via one nostril only (as in Ujjayi or Anulomviloma) or both nostrils while partially clenching the glottis at the same time (another type of Ujjayi). This aids in extending the exhale and lowering the force of the air being expelled. One should practise pranayama with attention and mindfulness to experience the pressure of the inspired air in the lungs, the silence of the mind during retention, or the emptying of the lungs after exhalation. In other words, due to our control over breathing, one addresses all respiratory reflexes when practising pranayama.

### **2. CONCLUSION**

The supportive research finding suggested that pranayama is easy to instruct, can be performed in virtually all circumstances without any cost or equipment and has significant

psychophysiological effects. It is not having any side effects if done properly. It is conceivable that, in the future, health-care providers will confidently prescribe specific yogic breathing practices for better results in their treatment.

## REFERENCES

1. Pramanik, Tapas, Hari Om Sharma, Suchita Mishra, Anurag Mishra, Rajesh Prajapati, and Smriti Singh. "Immediate effect of slow pace bhastrika pranayama on blood pressure and heart rate. "The Journal of Alternative and Complementary Medicine, 2009; 15(3): 293- 295.2.
2. Dhungel, K. Upadhyay, V. Malhotra, D. Sarkar, and R. Prajapati. "Effect of alternate nostril breathing exercise on cardiorespiratory functions. "Nepal Med Coll J., 2008; 10(1): 25-27.3
3. Sengupta, Pallav. "Health impacts of yoga and pranayama: A state-of-the-art review. "International journal of preventive medicine, 2012; 3(7): 444.4.
4. Pissadaki, E. K., and Bolam, J. P. The energy cost of action potential propagation in dopamine neurons: clues to susceptibility in Parkinson's disease. Front. Compute. Neurosis, 2013; 7: 13.