

## Science in Sanatana Dharma is Verifiable

## The Science of Pranayam

In the Bhagavad Gita, Shri Krishna outlined the various forms of yoga. Swami Patanjali then further expounded upon the yogic practices in his *Yoga Sutra* so that the common man had a highly detailed path by which he could achieve *Samadhi*, or union with God. In his compilation, he describes meditation as a yoga of its own, known as *Raja Yoga*, with its fundamental aspect concerning *Pranayam*.

The word *Pranayam* is made of two words: *Prana* meaning life force and *Ayam* meaning control. It is widely considered that the power of life resides most subtly in the breath, and thus the control of breath results in the control of the *prana*, which in turn has many beneficial side effects besides the main effect of mastery of the mind. *Pranayam*, a branch off the tree of *Sanatan Dharma*, demonstrates how *Sanatan Dharma* and science are similar; in that both fields attempt to discover Truth based off of a set of practices known today as the Scientific Method. Discovering the importance of breath control was just one way that the ancient *rishis* of India used the *Scientific Method*. Top scientists of world-renowned medical agencies back their thousand-year old research even today.

*Rishis*, the ancient scientists of India discovered many concepts that are used at present day, from the concept of zero to *ayurvedic* medicines. They would observe natural events and form hypotheses about them. Then, staying true to the Scientific Method, they would form theories that would turn into laws assuming the theories were not debunked by new information. One such theory as quoted by Nika Karan, a self-proclaimed yogi, is that the ancient *rishis* realized that animals with a slower breathing rate, such as tortoises, elephants, and pythons, lived longer than those animals with a faster breathing rate, like mice and rabbits. By lowering one's breathing rate, one's heart rate slows down, thus lowering the blood pressure and causing one to relax. It is common knowledge today that increased blood pressure often leads to cardiac arrest. Thus, this theory is applicable to *Homo sapiens* as well. For example, when one gets angry, the chemical reactions in the body completely contradict what is necessary for a homeostatic constitution. When a man is angry his heart rate increases, he breathes faster, and his

blood pressure increases significantly. By practicing *Pranayama* and controlling the breath, one is able to conquer anger and its negative effects by focusing on the breath rather than the event that first instigated the negative emotions. Eventually, after enough practice, *Pranayama* can become a habit. One will not need to consciously overcome negative feelings. Nika Karan bases her website off of the claim that *Pranayama* can even help people lose weight. Therefore not only is it healthy for the respiratory system, it is also beneficial for people that want to lose or maintain their weight.

Many modern yoga gurus, such as Baba Ramdev, also promote *Pranayama* in their yoga teachings. He has described a seven-step *Pranayama* process, which is about 45 minutes in duration, to maintain a healthy and stress free life. The process includes the *bhastrika pranayama*, *kapal bhata pranayama*, *bahaya pranayama*, *anulom vilom pranayama*, *bharamari pranayama*, *udgith pranayama*, and the *pranava pranayama*. The seven *Pranayama* in the procedure have different breathing techniques and are used to enhance different body parts. Different *Pranayama* can also cure different problems. For instance, one is designed to alleviate high blood pressure problems and another for urinary problems.

More recent research by Western scientists in agencies like the National Institutes of Health (NIH) also claim that *Pranayama* has many positive attributes. In the article “Rhythmic Breathing as a Nursing Intervention”, many points are made to explain how a nurse can lead a patient in pain through *Pranayama* exercises so as to help the patient cope with physical discomfort. Dr. Ankala Subbarao concurs with NIH’s claim on the benefits of breath control. She also states that improper breathing leads to the effects of oxygen starvation such as heart disease, sleeplessness, and fatigue. Furthermore, she claims that if one were to control their breaths they may have a healthier metabolism, better concentration, and more self control.

Theories from the ancient Indian *rishis* and further research from modern doctors concur that breath control leads to a happier and healthier lifestyle. Both claims, one from a *Sanatan Dharmic* background and the other from a Western scientific background, agree that there is truth in the benefits of the practice of breath control. Subsequently, a conclusion has been established in which the Truth is verified due to the fact that both parties applied the Scientific Method. One may be so bold one as to say that science and *Sanatan Dharma* are the same thing, if not in general then at least in such cases as this.

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E Mail \_ **Ronnie Kumar** hushardesi24@gmail.com to omcenter

"We are attaching our Sanatan Dharma Scholarship Essay. There was some confusion about the submission date. One flyer said August 1st and another said July 31st. Samir Asthana said it was okay for us to submit it today on August 1st. We have written about the college student topic. This essay was done by three students from UMBC (Univeristy of Maryland, Baltimore County). They are Krishan Zaveri, Rajashree Mishra, and Ronnie Kumar."

Hari Om,  
Ronnie Kumar

Dated: 8/1/2011 - 2:11 PM