Indian classical traditions including yoga emphasize the existence of pran, the infinite and omnipresent cosmic energy. This whole creation, Mother Nature is bountiful. So is pran. At the physical level, pran manifests as light and other forms of physical energy. In our body, pran is the vital force that energizes us. The science of pranayam (a yogic breathing technique) deals with the knowledge, control and enrichment of this vital force. The classical Upanishads, which were written over 5000 years ago, give us guidelines about pranayam. Prashn Upanishad (2:13) describes pran as the universal governing force that protects and enhances us like our mother. The Bhagavad Gita describes pran and pranayam in a number of verses. Patanjali’s Rajayog and many tantrik texts describe a number of graded practices including pranayams that help us understand and harness this infinite reservoir of energy. The popular complementary healing systems pranic healing and reiki are based on the concept of pranic energy. Indian yogis and ayurvedic physicians have used the power of pranayam for healing since time immemorial.

The mind and body are intricately interrelated. Besides wasting energy, irregular breathing is associated with a restless mind. In contrast, slow, deep and uniform pranayam breathing produces psychosomatic relaxation especially when it is associated with meditative awareness. During pranayam, one can follow the breath as it flows in and out. One can also visualize cosmic pran flowing into the body and mind with each inspiration enlightening the whole being. According to yogic texts, the practice of pranayam results in inner peace and joy, broadening of vision and development of positive emotions like unselfish love. Pranayam is described as a means to achieving divinity and perfection. According to Patanjali (Yoga Darshan, 2: 52–53) pranayam unfolds the inner light and improves the power of concentration.

We have previously reported [1] that savitri pranayam (slow, rhythmic and deep breathing with a ratio of 2:1:2:1 between inspiration, breath held in inspiration, expiration and breath held in expiration) produces a significant reduction in oxygen consumption and deep psychosomatic relaxation within 5 minutes. Telles and Desiraju [2] have demonstrated that a variant of
pranayam breathing is associated with a 19% reduction in oxygen consumption. In a study on healthy children who underwent pranayam training for 3 months, Udupa et al [3] have inferred modulation of ventricular performance as indicated by systolic time intervals. In an 18-year old female with frequent premature ventricular complexes (PVC), Prakash et al [4] found that deep breathing at 6 breaths per minute abolished PVC; a significant reduction in the frequency of PVC during deep breathing at 6 breaths per minute has been reported in at least a subset of patients with unifocal PVC. The beneficial effect of deep breathing was suggested to be due to increased vagal modulation of sinoatrial and atrioventricular nodes. Ravindra et al [5] have shown that pranayam and relaxation training for 2 months reduced the frequency of palpitations in two patients with frequent PVC.

Given this evidence, I believe it is important to continue to investigate the physiologic effects of pranayam using scientifically valid methods and apply encouraging results to determine their effects on human health. The power of pranayam is there for all of us to harness. That is my opinion.

**Conflict of interests:** none

**References:**


Please cite this article as: Madanmohan. The power of pranayam. Medical Physiology Online, 16 Jan 2008, available from [http://www.medicalphysiologyonline.org](http://www.medicalphysiologyonline.org)

**Editor's note - conflict of interest:** I commissioned, reviewed and edited this manuscript. I was Dr. Madanmohan’s student from 2001 through 2006. We have worked and published several articles together.

E.S.Prakash, Editor, Medical Physiology Online.