

## Exploring potentials of science & technology for research in swaryogic science

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In the last three decades, the science and technology has revolutionized the world in respect of comforts of mankind. Now-a-days, the technology has been advanced in different dimensions of life; viz. Telecommunications, Agriculture, Medicines, Surgery, Cinema, Food Processing, Computer and Information Technology *etc.*

Yoga is an ancient heritage and culture of India and widely known & recognized all over the world for its healthful and therapeutic utility. U.N.O. has celebrated 21st June in 2015 as Ist International Yoga Day to spread the message of Yoga all over the world. In the last 2-5 decades, various Hathyogic practices; viz. Asnas, Pranayama, Satkarmas, meditation *etc.* have been found useful for preservation and promotion of Health as well as management of various physiological, psychosomatic and psychological disorders. (Mohan, J., 1996;

Naveen, *et. al.*, 1997; Malhotra, V. *et. al.*, 2002; Bijlanni, R.L. *et. al.*, 2006; Kosuri, M. & Sridhar, G.R., 2009; Vempati, R. *et. al.*, 2010)

Swaryogic Science is rarely known to the World community and need scientific research for its use in the interest of human welfare. The modern medical science has the scientific explanation for existence of two eyes for clear vision of three dimensional objects; existence of two ears to know the source and direction of sound; but the existence of two nostrils instead of one is yet to be explained. The Swaryogic science has the answer traditionally for the existence of two nostrils and their specific functions.

According to Swaryogic science, a man does not breathe evenly through both the nostrils but alternately. The micro-sound vibration so generated as a result of flow of breath is known as Swara in Swaryogic science. The functioning state of right nostril with its free flow of breath is known as Surya Swara; whereas the functioning state of left nostril is designated as Chandra Swara. Similarly, the free flow of breath through both the nostrils

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is being designated as Sushumna-Swara. Moreover, the functioning state of one of the nostrils can be realized in lateral lying portion of the body. In addition to this, the Swaryogic science describes the existence of five types of breath based on tattwas in Surya Swara as well as in Chandra swara. Functioning state of particular swara with specific tattwa has lot of significance in preservation and promotion of health, diagnosis and treatment of diseases, prediction of death, prediction of weather and environment, successful accomplishment of activities of daily regimen, efficiency of Games and sports etc.

There are descriptions about crude methods of verification of flow of swara along with a specific tattwa, but there is not scientific & digitalized instrument for 100% accuracy. These methods are briefed below for development of scientific instruments and their standardization :

- Detection of Tattvas from the shapes developed through water vapors of breaths** - In this technique, one has to exhale the breath deeply on the cleaned mirror and there is development of various shapes in respect of water vapors of breath. The result prediction is as follows :

	Shape of Water vapors	ie
(a)	Square shaped water vapors	Earth element
(b)	Half moon shaped water vapors	Water element
(c)	Triangular shaped water vapors	Fire element
(d)	Oval/Circle shaped water vapors	Air element
(e)	Scattered shaped water vapors or without any shape.	Space element

- Direction based Tattva and its Identification** - The Swaryogic science had described identification technique for Tattva's functioning state on the basis of direction of breath flow through a nostril as mentioned below - Similarly Tattva of a specific nostril is being identified through taste of saliva

	Breath Direction	Identification of Tattva
(a)	From the center of the nostril	Earth element
(b)	After touching lower surface of the nostrils	Water Element
(c)	After touching upper surface of the nostrils	Fire element
(d)	Breath coming out laterally and upwardly	Air element
(e)	Breath coming out in whirling motion	Space element

in the mouth as mentioned below :

	Taste of Saliva	Identification of Tattva
(a)	Sweet taste	Earth element
(b)	Astringent taste Like a Bitter guard	Water element
(c)	Taste like fruits of neem tree	Fire element
(d)	Sour taste like a curd	Air element
(e)	Pungent taste like a chilli with hotness and bitterness	Space element

- Breath- Length Based Tattva Identification** - This technique involve the measurement of length of exhaled breath through a nostril under the normal circumstances. The identification criteria is as follow :

	Length of exhaled breath	Identification of Tattva
(a)	12 Angula	Earth element
(b)	16 Angula	Water element
(c)	4 Angula	Fire element
(d)	8 Angula	Air element
(e)	Almost no breath	Space element

- Tattwas can also be identified on the basis of variations of temperature in a breath of a specific nostril. The criteria is as follow :

	Temperature of breath	Identification of Tattva
1	Luke warm temperature	Earth element
2	Extremely hot temperature	Fire element
3	Slightly cold temperature	Air element
4	Cold breath	Water element

In view of above mentioned techniques, there is a need of developing technology and instruments on the basis of -

1. Chemical technology in respect of shapes of water vapors of breath.
2. Air-censors based computerized technology to detect the direction of breath.
3. pH based chemical technology for precise detection of taste of saliva and their standardization.
4. Air intensity based technology to measure the length of breath.
5. To develop thermometers for measuring slight temperature variations in the exhaled breath.

The development of above mentioned technology for identification of Tattvas will verify the traditional and ancient knowledge of Swaryogic science in respect of existence of tattvas and will also revolutionize the Yogic world for their therapeutic use. The Swaryogic therapy, if combined with Hathyogic therapy, will improve efficacy of yogic practices. The above said development of technology will open new chapters of research especially in the medical field.

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