

# KAYA KALPA METHODS ADOPTED BY SIDDHARS - A SCIENTIFIC APPROACH

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## ABSTRACT

Thirumular says in his "THIRUMANTHIRAM" the body is a sacred instrument to contain the soul and therefore must be nurtured well to safeguard the life. Thirumular is reported to have lived a long span of three thousand years according to tradition. The art of longevity and the attempts of immortalising the corporeal human body were the ultimate aims of Siddhars as understood from their numerous treatises on the art of rejuvenation - Thirumular Karpam - 300, Bohar Karpam - 300, Thiruvalluvur Karpam - 300 Yugimuni Karpam - 300 etc. which form some of the excellence works in this regard. One of the means to rejuvenate the body was achieved through the art of breathing (Pranayama) which has a direct bearing on the basal metabolic rate and the span of longevity.

In this paper an attempt has been made to throw some light on the scientific basis of the various Kaya Kalpa methods adopted by Siddhars.

## Introduction :

The great Siddhar Thirumoolar describes medicine as follows :

Medicine means one that ensures physiotherapy -  
one that ensures psycho therapy -  
one that ensures prevention against disease and  
one that ensures prevention against mortality.

So medicine is not a simple term as used in the modern parlance, but it should possess all the potential properties as stated above in the Thirumoolars version.

He also says,

உடம்பாராநிலிவின் உயிராநிலிவர்  
திடம்பல மெய் ஆராமம் சேரவும் ஸரபுடார்

The body is a sacred instrument to contain the soul and therefore must be nurtured well to safeguard the life. Thirumoolar who is reported to have lived a long span of 3000 years according to

tradition. The art of longevity and the attempts of immortalising the corporeal human body were the ultimate aims of siddhars as understood from the numerous treatises on the art of rejuvenation - Thirumoolar karpam 300, Bogarkarpam 300, Yugimuni karpam 300, Thiruvalluvur karpam 100 etc. which form some of the excellent works in this regard.

Siddha means one who has attained immortality. They endowed with inner sight have also revealed some of the secrets of the inner mechanism of man concerning the control of breathing and longevity. Many western scholars have accepted the ancient consumptions that man is a trinity of body, mind and spirit. Various techniques of physical exercises and sports were devised to keep men and women healthy. They were

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designed to supply the needs of the body (Annamaya kosam), with its bones, joints, muscles, tissues, cells and organs. Indian scholars call this discipline 'the conquest of matter'. Only recently the western world became aware of the techniques developed in ancient India for examining the systems of breathing, blood circulation, digestion, assimilation, the endocrine glands and the nerves, the subtle forms of which collectively known as 'the conquest of life force; (Prana maya kosam).

In this paper emphasis is laid on 'Pranayama' to keep the involuntary or autonomous controlling systems of human body in a balanced state of health and perfection.

There are eight stages in Yoga practice as enumerated in Thirumoolar Thirumanthiram (Stanza No. 534).

### Ashtanga Yogam :

1. Eyamam - Purity in mind
2. Niyamam - Restraints
3. Asanam - Postures
4. Pranayamam - Control of vital life energy.
5. Prathyaharam - Withdrawal from outward flow of mental energies.
6. Tharanai - Concentration
7. Dhyanam - Silent and deep meditation
8. Samadhi - Trance

Eyamam, Niyamam, Asanam and Pranayamam are essential parts of the Yoga of action (Karmayogam). They keep the body and mind healthy for performing all acts that please God.

Pranayamam, Prathyaharam and Tharanai are parts of knowledge (Gnanam).

Dhyanam and Samadhi are the yoga of devotion and love (bhakthi)

**Eyamam** - It is a collective name for universal, moral commandments. Purity of

mind is the ultimate aim i.e. routing out of six evils viz. Passion (Kamam), Anger (Krodham), Greed (Lobem), Infatuation (Moham), Pride (Madham), Malice & envy (Marcharyam). This eradication is achieved by occupying the mind with good constructive thoughts leading to divinity.

மனமே மூலம் உருவம் கையாண்டால்

மந்திரம் எழுதிக்கொண்டால்

(Thirumanthiram)

**Niyamam** - It means purity of behaviour, habits, cleanliness of person and surroundings. Austerity enables one to discipline the body and to endure hardship and adversity, thus directing the mind towards the self within. Thus the Niyamams are the virtues which calm the disturbed mind leading towards peace both within and around the person.

**Asanam** - Our body has to be kept in good condition since it serves as an instrument to attain realisation. Asanas purifies the body and mind and have preventive and curative effect. They are innumerable catering to the various needs of the muscular, digestive, circulatory, glandular and other systems of the body. By practising Asanas, the persons physical disabilities and mental distraction vanish and the gates of the spirits are opened. Asanas bring health, beauty, strength, firmness, lightness, clarity of speech and expression, calmness of nerves and a happy disposition.

**Pranayamam** - It is a conscio prolongation of inhalation, retention and exhalation. Modern scientific study shows that a man breaths in and out 12,000 litres. of air per day. This is according to the respiratory rate of 18/min. and respiratory depth of 500 cc. The inspired air contains only 20% of oxygen and the expired air contains about 16% of oxygen. So it

indicates that oxygen retained by the body is only 4% (480 liter per day). Similarly the blood does not utilise all its oxygen to the tissues but only 20% is being used. From this, it is clear that there is loss of energy (Pranam) during every act of respiration and it confirms the ancient concept of Siddhars. The Kayakalpa methods enumerated by Siddhars are therefore to eliminate the wastage in the system and then rejuvenate the degenerated organisms to make them invulnerable to death - all through the control of breathing.

Respiration should be rhythmical. It is obtained according to Thirumoolar by hormonising the three movements - inhalation through left nostrils - 16 mathirai (Pooragam), retention of the inhaled air to the extent of 64 mathirai (Kumbagam), exhalation through right nostrils - 32 mathirai. Only through practice, the Siddha yogi will be able to prolong life successfully.

During normal inhalation an average person takes in about 500 cubic centimeter of air; during deep inhalation the intake of air is about 6 times as great amounting to almost 3,000 cubic centimeters. The capacities of individuals vary according to their constitution. The practice of pranayama increases the person's lung capacity and allows the lungs to achieve the optimum ventilation. The breathing affects the heart rate. During the prolonged holding of breath a slowing of heart rate is observed which ensures increased rest to the heart muscles.

Most of us assume that because breathing is usually automatic, it is beyond our active control. This is not true. In Pranayama, by arduous training of the lungs and nervous system, breathing can be made more efficient by changing its rate, depth and quality. The lung capacity of great athletes, mountain climbers and Yogis is far greater than that of

ordinary man, allowing them to perform extraordinary feats (See Annexure). Better breathing means a better and healthier life.

In recent decade, western medicine after experimentation has come to recognise and use the health giving and invigorating effects of what is called voluntary respiration. Recent researchers in U.S. has proved that oxygen plays a major role in the body to prevent senility changes. So oxygen chambers are developed. Another study has shown that Asanas and breathing can arrest the modern run away problem of heart ailments. There is 73% reduction in angina pain. In few cases, yoga coupled with dietary changes and life style modification also lead to a reversal of blockages in the heart vessels. (Dr. C.S. Manchand, New Delhi).

In 1994, a random selection of patient with osteo- arthritis in the hands were given yoga practice, once a week for eight weeks. Control group was given similar exercise regime but no therapy. Those who practiced yoga had a significant in finger mobility and also had reduced pain.

In 1985, 53 patients with bronchial asthma were given training in Asanas, Pranayama and meditation for 65 minutes/day, and the control group was given only drug. The Yoga group had fewer attacks and needed less drugs than the control group.

### **Pranayama in Prevention of Ageing :**

The reasons for the variations in life expectancy in different people lie in a combination of factors such as the genes, people inherit from their parents and their mother's health during pregnancy. A good inheritance means that a person is more likely to have a strong heart, good circulation, a healthy brain, sharp eye sight and hearing. However, individuals who have inherited unhealthy genes might be able to live out their potential life span to its full and live a

reasonably long life, if they take care of themselves and try to minimise any of the risk factors that cause poor physical and mental health and ageing.

**Environment :** Many physical and mental patterns can be explained only by the shared environment of parents and their children.

The risk of short life is due to inheritance or due to environmental factors - can be greatly reduced if people ensure that they lead a healthy life, a life led by great siddhars with harmony between body, mind and spirit. It is achieved through correct breathing, postural exercise and meditation.

Various studies show that basal oxygen consumption and cerebral blood flow decline considerably in the process of ageing. Scientists maintain that the onset of ageing is due to auto-intoxication caused by the loss of normal balance between anabolism and catabolism. Therefore, a high degree of constancy is to be maintained for keeping up equilibrium of acid alkaline balance in the body, eliminating the waste products regularly. In Pranayama, effective supply of oxygen to various body tissues is maintained and accumulation of wastage in the system is eliminated.

### **Diet in the science of longer life :**

Diet according to Siddha system should play a vital role in the maintenance of the three humors and the health of the body. The body is nourished by nutrient fluid and quality of this nutrient fluid depends upon the quality of the food.

Thirumoolar says moderation in diet ensures an advantage in life and that leads to prolongation of life by way of reducing excess fatty substances in the body. Thirukkural, the Tamil classic also denotes a whole chapter to medicine. In this, it lays emphasis that the secret of longer life is to eat with moderation. It has been universally agreed by all dietitians that moderation in diet is a sound principle which helps to build up a healthier, happier and longer life.

Food should be wholesome, palatable and congenial to the body. It is broadly divided into three kinds - sathvic, rajasic and thamasic. Sathvic food promotes longevity, health and happiness; rajasic produces excitement and thamasic produces diseases. So sathvic food in moderation was advised by Siddhars.

**Conclusion :** The Siddhars were the greatest scientists in those days. They were popular writers in Tamil. Although Siddha works deal with several subjects, the discussion here is confined only to kalpa treatment. Thirumanthiram is one of the important works in Tamil dealing with the science of life. It is divided into nine chapters setting forth the fundamental principles of life. The third chapter consisting of 332 verses deals with the prolongation of life by the control of breathing.

So those who can follow the principles of Eyamam, Niyamam, Asanam and Pranayamam with moderation in taking sathvic food can definitely lead his full span of life with perfect health and youthful appearance.

## ANNEXURE

### Respiration in rest and exercise :

Normal O<sub>2</sub> consumption for an adult at rest 250ml / min.

For athletically trained average male 4000 ml / min.

Male marathon runner 5100ml / min.

### O<sub>2</sub> Diffusing capacity at rest and exercise

Non athletes at rest 23ml / min.

Non athletes during maximum exercise 48ml / min.

Swimmers during maximum exercise 71 ml / min.

Oarsman during maximum exercise 80 ml / min.

### Cardiac output at rest and exercise :

Average man at rest 5.5 lit / min.

Maximum output in male marathoner during exercise 30lit / min.

### Muscle blood flow at rest and exercise :

Resting blood flow : 3.6ml / 100 gms muscle / min.

Blood flow during maximum exercise 90 ml / 100 gms muscle / min.

(Ref. Physiology by Guyton)

## **REFERENCES**

1. T.V. Sambasivampillai 1931 Cyclopaedic dictionary on Indian Medical science.
2. Thirumular 1940 Thirumanthiram 3000 P.N. Chidambaram mudaliar
3. A. Shanmugavelan 1992 Siddhars science of longevity and kalpa - medicine of India. Directorate of Indian medicine & Homeopathy publication.
4. N. Kandaswami pillai 1979 History of Siddha medicine, Govt. of Tamilnadu publication.
5. R. Thyagarajan 1986 Siddha maruthuvam Sirappu Palani Dhan-dayuthapani temple publication.
6. S.C. Manchanda 1997 Role of Yoga in Coronary heart disease Science Congress, Chennai.
7. Garfinkle, M.S. et al 1994 Osteo-arthritis, Journal of Rheumatology, 21 (12) - 2341 - 3 Dec.
8. Nagarathna, R. et. al. 1985 Bronchial Asthma, Vol. 291 - 1900.

सारांश

## सिद्ध पुरुषों द्वारा निर्माणित काय कल्प क्रिया - एक वैज्ञानिक तकनीक

- एम. राजलक्ष्मी  
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तिरुमूलर “तिरुमंतिरं” में कहते हैं कि शरीर एक पवित्र साध्य है। जिस में आत्मा रहता है और इसी लिए उसको अच्छी तरह से रखना चाहिए ताकी वह जीवन की रक्षा कर सके। प्रणालिका से कहा जाता है कि तिरुमूलर तीन हजार वर्षों तक जीवित थे। लम्बे आयु तक जीने की कला और नश्वर शरीर को अमर बनाने का तरीका ही सिद्ध पुरुषों की मुख्य हेतु थे। ये हम उनके ग्रंथों से अमर रहने का तरीका के बारे में समझ सकते हैं। तिरुमूलर - ३००, बोहर कर्पम - ३००, तिरुवल्लुवर - ३००, युगी मुनि कर्पन - ३०० - यह सब इस विषय के बारे में लिखे मुख्य ग्रंथों हैं। शरीर को अमरत्व बनाने की कला को श्वास लेने की क्रिया (प्राणायाम) से साथ किया जा सकता है जिस में बेसल मेटबोलिक रेट (based metabolic rate) और दीर्घ आयु के ऊपर सीधा असर पडता है।

इस पेपर में सिद्ध पुरुषों द्वारा निर्माणित कायकल्प तकनीक को एक वैज्ञानिक तरीके से समझने का एक प्रयत्न किया गया है।