

**RELEVANCE OF SURYA NAMASKAR DURING LOCKDOWN**Yogita Shrivastava<sup>1</sup>, O. P. Dwivedi<sup>2</sup> and Jinesh Jain<sup>3</sup><sup>1</sup>Professor, Dept. of Kaumarbhritya, DMAMCHRC, Nagpur.<sup>2</sup>Professor, Dept. of Rachana Sharir, Govt. Ayurved College, Rewa, MP.<sup>3</sup>Assistant Professor, Dept. of Panchakarma, Govt. Ayurved College, Rewa, MP.**\*Corresponding Author: Yogita Shrivastava**

Professor, Dept. of Kaumarbhritya, DMAMCHRC, Nagpur.

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**ABSTRACT**

With the beginning of COVID-19, people were forced to stay home. Their social life was nearly halted. They could not go out and meet others. The physical movements became very restricted. As the governments induced SOPs for social distancing, the gyms, indoor play courts, swimming pools and even parks were closed and entry prohibited. The uncertainty about the disease also resulted in people choosing to stay home to be safe. People were doubtful even about going for a morning walk. Those working from home were stuck to their rooms during the lockdown. All these factors made the life style sedentary. Therefore, exercising at home became the necessity. In such circumstances, Surya Namaskar could be the best choice to stay fit. It does not require big space or special set up or equipments. Hence, Surya Namaskar is an economic and easily available workout option at home.

**KEYWORDS:** Surya Namaskar, SN, Sun salutation, COVID-19.**INTRODUCTION**

In order to maintain our social distance to prevent the spread of COVID-19, staying active became critical for physical and mental health. As people spend more time at home to stop the spread of COVID-19, it was but natural that daily activity routine changed. Many of usual venues have been shut down and there were no chances of getting incidental exercise from commuting or running errands.

But the COVID-19 scenario showed that it's especially important to stay active during the lockdown time. Regular exercise is necessary for both our physical as well as mental health. The benefits of regular exercise can be summarized as-

- Reduction in the risk of health conditions like stroke and heart disease,
- Better control over weight
- Decrease in stress levels and anxiety
- Improved sleep quality and decrease in insomnia

Earlier for regular exercise public had a choice of different variety of physical activities like walking, jogging, running, cycling, swimming, going to gym, yoga classes, zumba sessions, aerobics etc; outdoor games like volleyball, football, Tennis, cricket, golf etc; indoor games like table tennis, badminton and many others.

But presently in order to follow government norms and ensure social distancing to stop the spread of the virus and in most places people can't currently:

- go to gyms, health clubs or fitness centres
- visit public swimming pools
- play indoor or outdoor organised sporting events
- attend classes, such as yoga or dance, in community centres and halls
- use playgrounds or outdoor gyms
- visit national or state parks
- exercise with a group such as a boot camp or team sport

Physical activities that can be done at home can include weights training —with filled water bottles, cans or jars, yoga, pilates, backyard sports, going up and down stairs, on-the-spot running, star jumps, sit ups and push ups, gardening, dancing, virtual fitness classes, Zoom or Skype group lounge exercises with friends. Amongst these, the easiest and the most feasible way out is performing Surya Namaskar at home. It could be the best possible option for exercise at home in minimum space and at no cost.

**What is Surya Namaskar (Sun Salutation)**

Surya Namaskar or Sun Salutation is a set of 12 powerful yoga poses. Surya Namaskar is the Sanskrit name for a particular sequence of twelve yoga asana (physical postures), known as Sun Salutation in general. It is probably one of the most widely known yoga practices.

It has been incorporated into different traditions of Yoga such as Hatha, Vinyasa and Ashtanga. The term is made of two Sanskrit roots; *surya*, meaning "sun" and *namaskar* meaning "greetings" or 'salutations'".<sup>[1]</sup>

In Indian culture, Surya means the Sun God. The sun is regarded as the source of all life, and it is therefore of great importance. In Vedic tradition, the sun symbolises consciousness and the Divine. The meaning of the word *Namaskar* is to bow in respect and thankfulness.

Traditionally, the practice of Surya Namaskar was used as a means of paying respect to the sun as it provides an opportunity to express gratitude to the sun for maintaining life on this planet since long.

*Surya Namaskar* is considered to be one of the most important yoga practices, generally advised as a morning practice. It is supposed to raise the levels of *pranashakti* (life energy) which is most abundant at dawn. The sequence stimulates all muscles, organs, systems and chakras in addition to cultivating concentration and stillness of mind. It provides a complete work-out for body, mind and spirit. It is an energizing and efficient way to connect with inner strength and stability and is often used as a warm-up at the start of a longer yoga practice.

The exact origins of Surya Namaskar are widely debated. Some scholars believe it to be thousands of years old, whilst others contend that the physical sequence is a 20th-century creation, designed by the raja of Aundh to accompany ancient Vedic mantras which honour the sun.<sup>[2]</sup> The oldest known text to describe Surya Namaskar as a sequence of asana is the *Yoga Makaranda*, written in 1934 by T. Krishnamacharya.<sup>[3]</sup> Although Krishnamacharya is often considered to be the father of modern Hathayoga. -) It is unclear whether he invented the sequence or learned it from his predecessors.

The twelve asana of which Surya Namaskaris composed of are:

1. Pranamasana (Prayer Pose)
2. Urdhva Hastasana (Upward Salute)
3. Uttanasana (Standing Forward Fold)
4. Ashwa Sanchalanasana (Equestrian Pose or Low Lunge)
5. Chaturanga Dandasana (Plank Pose)
6. Ashtanga Namaskara (Eight Limbed Salute)
7. Bhujangasana (Cobra Pose)
8. AdhoMukha Svanasana (Downward-facing Dog Pose)
9. Ashwa Sanchalanasana (Equestrian Pose or Low Lunge)
10. Uttanasana (Standing Forward Fold)
11. Urdhva Hastasana (Upward Salute)
12. Pranamasana (Prayer Pose)

Though, this sequence is widely accepted as the traditional version, modified variations are taught by different schools of yoga, sometimes even incorporating additional postures. For example, Ashtanga yoga teaches two sequences, Surya Namaskar A and Surya Namaskar B, both of which contain different asana to those listed above. (4 <https://www.fitsri.com/articles/surya-namaskar-typ>, 5 <https://de.ashtangayoga.info/ashtanga-yoga/surya-namaskara-a-sonnengruss/>) In some traditions such as Sivananda, each step of the sequence is combined with a Sanskrit mantra. (6 <https://sivananda.org/the-sun-salutation/> -)

The transition from posture to posture is facilitated by either an inhalation or an exhalation, allowing the practitioner to connect to their breath as a means of cultivating concentration. The repetitive nature of Surya Namaskar fosters a meditative practice, in which little thought needs to be given to the movement once it has been learned. Additionally, Surya Namaskar provides many overall health benefits such as:

- Maintaining cardiovascular health
- Stimulating the nervous system
- Improving strength and flexibility
- Enhancing cognitive functions
- Relieving stress and fatigue
- Regulating hormones

The sequence is advised to be practised daily for maximum benefit. The performer may chose number of cycles as per his capacity Those, who have issues with blood pressure or recent injuries or surgery should not practice Surya Namaskar without consultation. Pregnant women also are not supposed to do all the postures and should consult an experienced prenatal teacher before practicing.

## DISCUSSION

A study reported that SN has positive physiological benefits on body by improvement of pulmonary function, respiratory pressures, hand grip strength and endurance, and resting cardiovascular parameters. The differences between SN slow and fast manner on comparison concluded that t the effects of fast suryanamaskarare similar to physical aerobic exercises, whereas the effects of slow Surya namaskarare similar to those of yoga training.(7 **A comparative study of slow and fast suryanamaskar on physiological function; Ananda Balayogi Bhavanani, Kaviraja Udupa, 1 Madanmohan, 2 and PN Ravindra Int J Yoga. 2011 Jul-Dec; 4(2): 71–76. PMID: 22022125**)

The increase in muscle strength and endurance time may be due to the stimulation of skeletal muscles during the isometric contraction which is automatically maintained when the person is steady in different postures of *suryanamaskar*. This may also be due to the delayed onset in muscular fatigue.

The same study compared maximum inspiratory pressure (MIP) and maximum expiratory pressure (MEP) in fast and slow Surya Namaskar which showed that FSN has a more significant effect on MIP than on MEP.

Due to the fast rhythm of various postures in Surya Namaskar, mostly all the large muscle groups are subjected to rhythmic contraction and relaxation. This is similar to exercises that involve large muscle groups. Probably this brings about increase in venous return leading to rise in stroke volume and SP. Udupa et al showed a fall in HR and rise in SP following SN training but the pattern was fast or slow is not clear. **(8 Udupa KN, Singh H, Settiwar RM. Physiological and biochemical studies on the effect of yogic and certain other exercises. Indian J Med Res. 1975;63:620-4. [PubMed] [Google Scholar])**

In a study it was found that Surya Namaskar shows immediate improvement in flexibility of the muscles. The possible reason could be that Surya Namaskar is the composed of twelve exercises involving stretching, holding and relaxation.

Stretching is most commonly advised as a method for increasing flexibility. The increased range of motion resulting from prolonged stretching is most likely due to an increase in length of both connective and muscle tissue. Increased connective tissue length can occur due to its property of elastic elongation. (9 Measuring Immediate Effects of Surya Namaskar on Trunk and Hip Flexibility among Young College Going Students Kapuria Nishi<sup>1</sup>, Mehta Krupa<sup>1</sup>, Sorani Dinesh<sup>2</sup>, Rathod Sheshna<sup>3</sup> International Journal of Health Sciences & Research (www.ijhsr.org) 73 Vol.9; Issue: 10; October 2019)

One study conducted to check the effect of Suryanamaskar on parameters of obesity showed good effect on BMI, chest circumference, abdominal circumference and buttock circumference in the participants.

(10 Dr.Sarvesh Kumar Yadav, Dr.Kirti R. Bhati\* and Dr.Lokesh Singh Bhati Assessment of the efficacy of suryanamaskar in management of sthaulya. [https://www.researchgate.net/publication/317277672\\_ASSESSMENT\\_OF\\_THE\\_EFFICACY\\_OF\\_SURYA\\_NAMASKAR\\_IN\\_MANAGEMENT\\_OF\\_STHAULYA](https://www.researchgate.net/publication/317277672_ASSESSMENT_OF_THE_EFFICACY_OF_SURYA_NAMASKAR_IN_MANAGEMENT_OF_STHAULYA) [accessed Oct 04 2021].

Regular practice of Surya Namaskar may maintain or improve cardiorespiratory fitness, as well as promote weight management, resulting in an energy expenditure of 230 kcals during a 30 min session for a 60 kg individual. (11 J BodywMovTher.2011 Jul;15(3):343-7.doi: 10.1016/j.jbmt.2010.05.001. Epub 2010 Jun 22. Acute effects of Surya Namaskar on the cardiovascular & metabolic system Bhavesh Surendra Mody PMID: 21665111 DOI: 10.1016/j.jbmt.2010.05.001

Another study was conducted to see the acute effects of Surya Namaskar on CVS and metabolism in which six healthy Indian men and women in the age group of 18–22 yearstrained in Surya Namaskar for two years participated. The conclusion was Regular practice of Surya Namaskar may maintain or improve cardiorespiratory fitness, as well as promote weight management. **(12 Acute effects of Surya Namaskar on the cardiovascular & metabolic system, Bhavesh S Mody)**

Considering female menstrual health issues a study done at Government yoga and naturopathy medical college, Chennai to determine the effect of Surya Namaskar on reducing pain and symptoms in primary dysmenorrhea, found that the practice of Surya Namaskar has a significant effect ( $P < 0.0001$ ) on reduction of pain in primary dysmenorrhea (13).

Effects of Surya Namaskar in children have not been studied on a large scale. Kumar G et al concluded that family and home based activities like Surya Namaskar that can be performed individually also may be the most appropriate way to increase energy consumption in obese adolescents as they do not indulge in group physical activities. (14 Kumar G et al. Measuring impact of Surya Namaskar and Pranayama for management of child obesity in India Int J Contemp Pediatr. 2019 Mar;6(2):352-357)

Parag et al conducted a study to assess the performance of school children in a digit letter substitution task following Surya Namaskar and concluded that physical activity done regularly in a structured manner followed by supine rest improves the process of attention in children. (15 Javadekar P, Manjunath NK (2012) Effect of Surya Namaskar on Sustained Attention in School Children. J Yoga Phys Ther 2:110. doi:10.4172/2157-7595.1000110)

## CONCLUSION

The positive effects of Surya Namaskar practice in all age groups shows a wide scope of inclusion of Surya Namaskar as the most economic and appropriate physical activity. During the COVID-19 situation, Surya Namaskar could be a great choice for all those who were left without availability of any exercise facility outside. Apart from being economic, it is not only good for physical health but it also can decrease stress and anxiety during pandemic. Thus awareness about the benefits of Surya Namaskar should be promoted among general public.

## REFERENCES

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