

# Effect of Suryanamaskara Practice on Working Women with Obesity

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## ABSTRACT

### Background

The reduction of weight in working women with obesity (WWO) is an important challenge for health policy. Although dietary interventions and various forms of exercise are widely available, patient adherence is usually low. A promising alternative is Suryanamaskara (SN). The SN was promoted for weight reduction in WWO, but there was little evidence of its efficacy.

### Objective

To assess the efficacy of SN in WWO

### Methods

Sixty WWO were randomized into 2 groups: SN (48.5±7.9 years) and control (46.4±8.9 years). The body mass index (BMI) was assessed at weeks 0 and 3 of all the subjects. Within group analysis were performed using SPSS version 21.

### Results

The statistical analysis showed a 3.08% decrease ( $p < 0.001$ ) in the post-SN group as compared to the pre-SN group and a 1.11% increase ( $p < 0.001$ ) in the post-control group as compared to the pre-control group.

### Conclusion

The findings of this study demonstrate that SN is associated with weight reduction in WWO.

### Keywords

Working women, obesity, Suryanamaskara

## Introduction

Obesity has become a global health concern, affecting individuals across different age groups and professions.<sup>[1]</sup> Among the affected population, working women with obesity face unique challenges due to their busy and sedentary lifestyles. Working women have high level of stress than non working women. Increasing amount of work stress at home and work place and its impact on family and home environment can be seen, which affect their emotional, psychological and physical health.<sup>[2]</sup> While there are several interventions available for weight reduction, adherence to these methods is often low. As a result, there is a need to explore alternative and effective approaches to tackle obesity in this specific group. Suryanamaskara (SN) has emerged as a promising alternative for weight reduction in working women with obesity. The SN is a dynamic Yoga practice that involves a sequence of postures performed in a flowing manner. It is believed to have several health benefits, including improving flexibility, strength, and overall well-being. However, despite its popularity, there is limited empirical evidence on the efficacy of SN specifically for weight reduction in working women with obesity. Therefore, this study aims to assess the effectiveness of SN in this population.

## Objective

To assess the efficacy of SN in working women with obesity

## Methods

To evaluate the efficacy of SN, a randomized controlled trial was conducted with a total of sixty working women with obesity. The participants were randomly assigned to two groups: the SN group and the control group. The mean age of the SN group was  $48.5 \pm 7.9$  years, while the control group had a mean age of  $46.4 \pm 8.9$  years. The body mass index (BMI) of all participants was assessed at the beginning of the study (week 0) and after three weeks of intervention (week 3). Within group analysis were performed using SPSS version 21. The paired t-test was utilized to examine the changes in BMI within each group.

## Results

The analysis of BMI showed a significant decrease of 3.08% ( $p < 0.001$ ) in the post-SN group compared to the pre-SN group. In contrast, the post-control group showed a 1.11% increase ( $p < 0.001$ ) in BMI compared to the pre-control group. [Table 1]

## Discussion

The present study aimed to investigate the efficacy of SN as a weight reduction intervention for working women with obesity. The findings of the study revealed significant differences in BMI between the SN group and the control group, indicating the potential effectiveness of SN in promoting weight reduction in this specific population. The observed 3.08% decrease in BMI in the SN group is noteworthy as it occurred within a relatively short intervention period of three weeks. This finding suggests that regular practice of SN may lead to tangible improvements in body composition and weight management in working women with obesity. The 1.11% increase in BMI in the control group highlights the importance of considering lifestyle factors and interventions for addressing obesity in this population. The effectiveness of SN can be attributed to its dynamic and holistic nature. The SN involves a series of postures that engage various muscle groups, promote flexibility, and increase overall physical activity

levels. This practice not only burns calories but also stimulates the endocrine system, which may play a role in regulating metabolic functions and promoting weight loss.<sup>[3]</sup> Moreover, the mind-body connection fostered by Yoga practices like SN may have positive effects on stress reduction and emotional well-being.<sup>[4]</sup> Chronic stress is often associated with overeating and unhealthy eating patterns, which can contribute to obesity.<sup>[5]</sup> By incorporating Yoga into their routine, working women may experience reduced stress levels, leading to improved eating habits and better weight management. Another factor that may have contributed to the positive outcomes of the SN group is adherence to the practice. The study did not explicitly mention adherence rates, but it is possible that the participants in the SN group were more motivated to practice regularly due to the enjoyable and accessible nature of SN. However, it is essential to acknowledge some limitations of the study. The sample size was relatively small, and the study duration was short. A longer-term study with a larger sample size would provide more robust evidence on the long-term effects of SN in this population. Additionally, the study did not include dietary interventions or lifestyle counseling, which could have influenced the results. Overall, the findings of this study contribute to the growing body of evidence supporting the benefits of Yoga, specifically SN, for weight reduction in working women with obesity. Yoga, specifically SN, as a holistic and accessible approach, has the potential to address not only physical aspects of wellness but also psycho-social factors, such as stress and emotional well-being.

## Conclusion

The findings of this study demonstrate that SN is associated with weight reduction in working women with obesity. The significant decrease in BMI observed in the SN group highlights the potential efficacy of this traditional Yoga practice as a viable option for weight management in this specific population. Thus, SN shows promise as an effective and sustainable intervention for weight reduction in working women with obesity. Future research should explore the long-term effects and mechanisms underlying the positive outcomes of Yoga practices like SN. Integrating Yoga practices like SN into mainstream healthcare approaches may offer a holistic and empowering solution to the complex issue of obesity among working women.

## References

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**Table 1: BMI analysis**

Variable	Mean $\pm$ Standard Deviation		Percentage decrease	<i>p</i>	Mean $\pm$ Standard Deviation		Percentage increase	<i>p</i>
	Before SN	After SN			Before Control	After Control		
BMI	27.49 $\pm$ 4.89	26.64 $\pm$ 4.72	3.08	<0.01*	25.61 $\pm$ 2.70	25.90 $\pm$ 2.71	1.11	<0.01*

BMI = body mass index, SN=Suryanamaskara, \* Significant at 0.01 level (paired t-test)