



# VINYASA YOGIC TRAINING INTERVENTION ON THE WEIGHT REDUCTION OF OBESE MEN

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**Abstract:** Yoga is a widely practiced activity known for its numerous health benefits and its ability to increase energy expenditure. Vinyasa yoga, a form of hatha yoga, is considered a moderate-intensity physical activity. It has gained popularity as a mindful exercise that improves overall health, including body weight management. Given the concerning situation, there has been an increase in scientific research on yoga, particularly its therapeutic aspects. Many studies have suggested that yoga is beneficial for physical well-being in various individuals. The objective of this study was to examine the impact of vinyasa yoga training on weight reduction in obese men. Thirty obese men were randomly selected from Yogi Yoga Classes in Thatipur, Gwalior district. The average height of the participants was 5 feet 6 inches, and their ages ranged from 30 to 45 years. The sole variable considered in this study was weight. A weighing machine was used to measure weight before and after the practice of vinyasa yoga. Initially, the participants were introduced to and shown demonstrations of different yogic exercises in the vinyasa yoga style. After eight weeks, the weight of the same group was measured again. To assess the significant difference in weight reduction between the pre- and post-test stages, a t-test was employed at a significance level of 0.05. The results of the study revealed a significant difference in weight reduction among the men between the pre- and post-test stages.

**KEYWORDS:** Vinyasa yoga, Suryanamaskara, Weight, Weighing machine, Intensity, Yoga, Pre-test, Post-test

## INTRODUCTION

The term "yoga" originates from the Sanskrit word "Yuj," which means to unite, join, or combine (1). It encompasses both a science and an art, carrying the message of holistic development for humanity (2).

In ancient times, all branches of knowledge were intertwined and inseparable. The sages of that era were revered figures representing spirituality. However, in modern times, yoga is based on ethical values such as sanctity, non-violence, brotherhood, peace, and cooperation. By incorporating yogic principles into one's life, an individual can strive towards success and lead a radiant, joyful, and purposeful existence. The regular practice of asanas (physical postures) and pranayama (breathing exercises) is essential for achieving this state (2).

The current lifestyle adopted by individuals has become a major contributor to physical and psychological ailments. Obesity has emerged as a significant concern due to this modern way of living. The cause of diseases, whether physical, chemical, genetic, or environmental, is believed to determine our susceptibility. Yoga addresses these etiological factors and aims to restore balance. In the case of obesity, sedentary lifestyles and decreased physical activity are the primary causes, leading to an imbalance between energy intake and expenditure. An obese individual consumes more calories than necessary for basic needs. A calorie is a unit of heat that represents the amount of heat required to raise the temperature of 7 kg of water by 1°C.

Weight gain indicates a persistent change in an individual's lifestyle that promotes the storage of excess energy in the form of fat tissues. Modifications in daily activities, dietary patterns, and the consumption of nutritionally void foods

(often referred to as empty calories) can contribute to obesity. Additionally, unforeseen events or accidents can lead to a decrease in physical activity, resulting in the accumulation of extra energy in the form of fat tissues in the body.

Food, considered vital at a gross level, is the essence of the physical body. In the realm of yoga, the Annamaya kosha (food sheath) signifies the importance of mindful eating, as food also acts as medicine for the body.

## STATEMENT OF THE PROBLEM

The main purpose of this study was to analyze the effect of vinyasa yogic training intervention on the weight reduction of obese men.

## METHODS

To fulfill the purpose of the study, 30 men were selected randomly from Yogi Yoga Classes, Thatipur region of Gwalior district. The age of all the subjects were in the range 30-45 years and the mean height was 5 feet 6 inches. For the comparison of weight before and after the practice of yoga, only weight was taken as the variable for the study and weighing machine was used to measure the weight. After initially taken the weight of all the subjects, Vinyasa yogic training was introduced for 8-weeks. After 8-weeks of training again the weight was taken of same subjects.

**Table 1: Schedule of Yogic training was as follow-**

<b>Total duration</b>	<b>8-weeks</b>
<b>Frequency</b>	6 days per week
<b>Duration</b>	45 minutes
<b>Time of practice</b>	7-8 AM

**Table 2: VINYASA YOGIC TRAINING**

(Divided into 4-Sections)

<b>1.</b>	<b>Warming Up</b>	<b>5 minutes</b>
<b>2.</b>	<b>High intensity Suryanamaskara</b>	<b>15 minutes</b>
<b>3.</b>	<b>Yogic Postures (15-20 No suryanamaskara postures)</b>	<b>15 minutes</b>
<b>4.</b>	<b>Relaxation (Yoga Nidra or Breathing practices)</b>	<b>10 minutes</b>

- 5 minutes general warm up which includes jumping movements and dynamic stretching.
- Suryanamaskara should be at high intensity for 15 minutes.
- Yogic asanas should be performed in sequence without any break till 15 minutes.
- At last there should be relaxation through yogic breathing or yog nidra.

To find out the significant difference in weight of men sample paired 't' test was used at 0.05 level of significance.

## RESULTS

Mean, Standard deviation and paired 't' test in weight reduction between Pre-test and Post vinyasa yogic training of men.

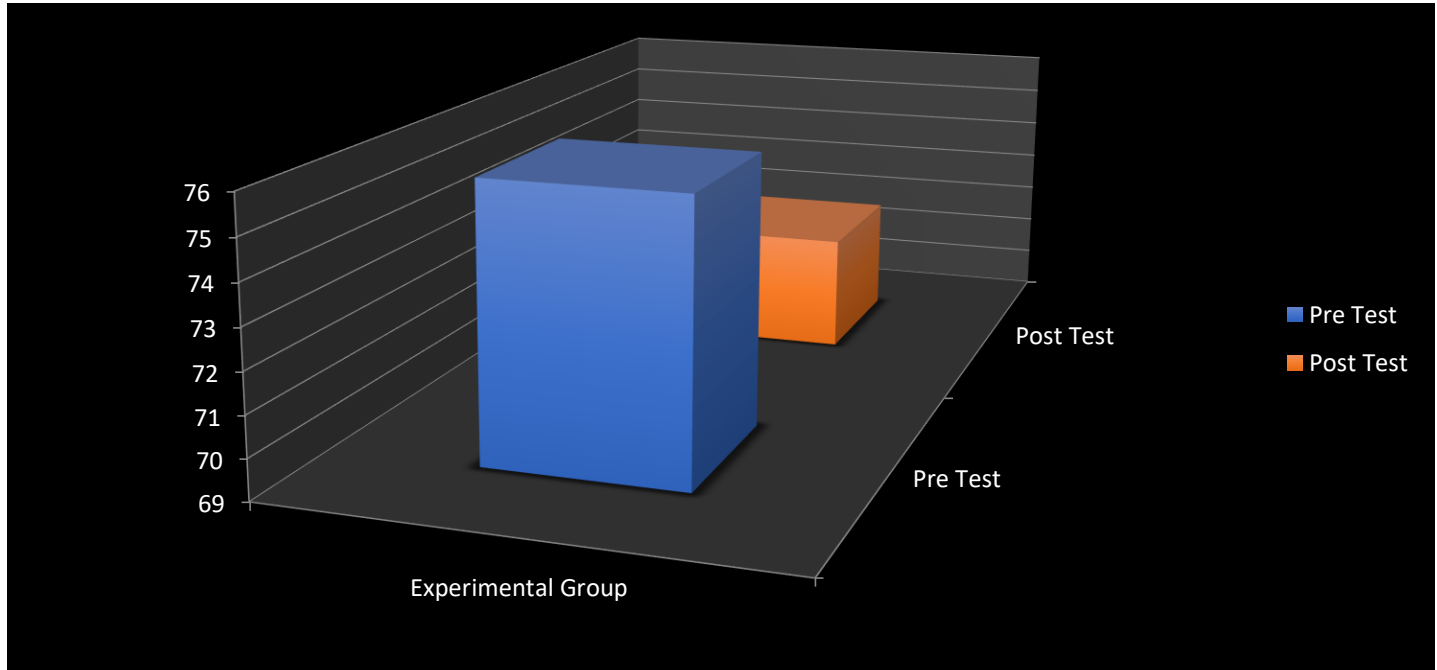
**Table.3 (Paired Samples Statistics)**

		<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
Pair 1	PreTest	75.8333	30	3.32268	.60664
	PostTest	71.9333	30	2.86697	.52344

Table. 4 (Paired Samples Test)

		Paired Differences		t	df	Sig. (2-tailed)
		Mean	Std. Deviation			
Pair 1	PreTest - PostTest	3.90000	.72397	29.505	29	.000

FigZure 1: Comparison of mean on weight reduction between pre-test and post-test of Men.



## DISCUSSION

Table.3 displays the mean and standard deviation of weight reduction in the pre-test as  $75.83 \pm 3.32$ , while in the post-test, it is  $71.93 \pm 2.86$ . According to Table 4, the 't' value for weight reduction is 29.50, which is significant at a 0.05 level of significance.

The number of calories burned during vinyasa flow practice varies based on factors such as individual size, intensity, and familiarity with the practice. On average, a person weighing around 70 kilograms can burn approximately 590 calories in an hour of vinyasa flow. Slower-paced practice results in fewer calories burned compared to a faster pace. Beginners tend to burn more calories than regular practitioners because their bodies are not yet accustomed to the movements, requiring more effort and leading to increased calorie burn (6).

Weight loss occurs when you burn more calories than you consume, with a deficit of 35,000 calories equivalent to 1 pound of fat. Research conducted by the American Council on Exercise suggests that an average individual burns about 3-6 calories per minute while practicing yoga, amounting to a total of only 180-360 calories burned during a yoga class. In contrast, a kettlebell workout can burn about 13-17 calories per minute, totaling 800 calories burned in an hour. This signifies a significant difference in calorie expenditure.

The intensity of a yoga class depends on the type and style of yoga practiced. More rigorous forms such as power yoga, hot yoga (Vikram yoga), and vinyasa flow are more intense, while restorative and hatha yoga are gentle and slower paced. Circuit training is considered superior in terms of overall metabolic boost and calorie burn, regardless of the intensity of a yoga class. However, yoga offers other benefits that can aid in weight loss.

Medical researcher and yogi Alan Kristal, in collaboration with the Fred Hutchinson Cancer Research Center from 2000 to 2002, conducted a study on the effects of yoga on weight loss. The study observed 15,500 middle-aged men and women involved in different types of physical activity, assessing the impact of diet, health, and exercise on weight changes. The results concluded that both overweight and normal-weight individuals who regularly practiced yoga for at least four years were less likely to gain weight compared to those who did not incorporate yoga into their lifestyle.

While practicing yoga may not directly result in burning more calories, it still holds a valuable place in a regular workout routine. Combining resistance training and cardiovascular activities maximizes calorie burn, making it an effective component of a fat loss program that promotes the maintenance of lean muscle. Yoga can be seen as active recovery and flexibility training between more intense workouts. Additionally, yoga contributes to improved sleep, better eating habits, and increased self-awareness, all of which can contribute to weight loss. By exercising properly and maintaining a clean diet, you can achieve your goals effectively (Kristin Rooke-2016).

## CONCLUSION

Limitations of the present study and based on the findings the meaningful conclusion were drawn that there is significant difference between pre and post-test on weight reduction of men through vinyasa yogic training.

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