

# ROLE OF YOGA IN WELL-BEING

"THE MOST IMPORTANT PIECES OF EQUIPMENT YOU NEED FOR DOING YOGA ARE YOUR BODY AND YOUR MIND."  
-BY Rodney Yee

## AIM

The purpose of this research is to find the therapeutic effects of yoga and to provide a comprehension review of the benefits of regular yoga practice and well-developed mind to our life.

## ABSTRACT

Yoga means union of individual consciousness with the supreme consciousness. Yoga is the absolute best wellbeing and health module as it is extensive and all-encompassing in nature. Wellness is a functioning course of becoming mindful of and settling on decisions toward a sound and satisfying life.

Yoga has been the subject of research in the past few decades for therapeutic purposes for modern epidemic diseases like *mental stress, obesity, diabetes, hypertension, coronary heart disease, and chronic obstructive pulmonary disease*. Individual studies report beneficial effect of yoga in these conditions, indicating that it can be used as nonpharmaceutical measure or complement to drug therapy for treatment of these conditions. However, these studies have used only yoga asana, pranayama, and/ or short periods of meditation for therapeutic purposes.

In the present study 40 obese (Overweight) subject were selected and was divided into the equal groups of 20 subjects each. One group was as an experimental group & other was control group. The training of yogic exercise was given to experimental group and the control group was not given any kind of yogic exercise. The yogic training program of 42 days was organized for 30 minutes daily. *The study revealed that a regular practice of yogic exercises for 42 days significantly reduces the weight of female subjects and improve the performance.*

Key words: Yoga, Yogasanas, Sat-kriyas, Obesity and Weight

## RATIONALE

"THE PURPOSE OF YOGA IS TO BUILD STRENGTH, AWARENESS AND HARMONY IN BOTH THE MIND AND BODY".

By 2020, the World Health Organization (WHO) predicts that depression will be the second largest contributor to the global disease burden, after ischemic heart disease (cite). Anxiety is also being diagnosed at greater rate than it was in the past. Despite these increase in diagnosis, treatment regimens typically include pharmaceutical therapies that are not sufficient to prevent further illness or promote mental well-being. Effectively addressing mental health concerns entails a comprehensive approach that addresses the root of the problem(s).

In this research, we provide evidence for yoga as a form of health promotion, illness prevention and treatment for depression and other mental health imbalances. Like other therapies, yoga is not a complete solution to mental health concerns. In conjunction with other approaches, yoga has great potential to lead people towards greater mental well-being.

### **Research Talk with Dr. S. L. Yadav (IIT- Kanpur)**

It was a pleasure to speak with DR. S. L. Yadav. He is one of the best yoga and naturopathy teachers at IIT Kanpur's Yoga and Naturopathy Center. I appreciate him taking the time to give me his valuable time. It's incredible to be able to learn from him and conduct a one-hour interview about obesity, mental health, asana, internal purification, mediation, proper digestion, joint pain, and social awareness.

He shares his personal life experiences, as well as his work and research experiences. It's fantastic to learn from him about how to improve one's life through Yoga.

We discuss why there is a lack of awareness of yoga in our culture or country, despite the fact that India is the birthplace of yoga. We also discuss Shiv, the ADHIYOGI, and there are numerous temples dedicated to the pure form of yoga. We also discussed why our government isn't doing anything about it. Whereas yoga is the only source that can cure us without the use of drugs, and we can live a healthy and happy life by practicing yoga on a daily basis. We only require proper instruction and knowledge of how to perform yoga correctly. Which postures and positions aid in the development of true positive strength? Yoga is similar to love in that it should be a part of our routine and habit, but we don't have to do it by any force.

He also corrected me where I was wrong and shared his thoughts on Indian heritage and culture in relation to historical events. He also discussed the negative effects of climate change and pollution on people's lives. Overall, it's a pleasure to converse with him. I would like to express my gratitude to Dr. S. L. Yadav Sir for his insightful comments on this subject.

Respected Dr. S. L. Yadav's Message to Respected Kumar Priya Ravi

Thank you for the fantastic project and subject...

### **Survey Talk with My Friend Adit (IIT- Kanpur)**

It's incredible to conduct a survey with my close friend Adit. He talked about how he learned Yoga from his mother. And his viewpoints on Indian and foreign societies astounded me. He stated that it is self-evident that doing yoga on a regular basis will improve one's health. He claims that we need yoga to help us cope with stress and anxiety. It's also causing havoc with our mental health. We discuss obesity and digestion issues in particular, as well as how to deal with them. Adit also stated that because we are giving our leasers time, we must also take care of our own health and flexibility. In this field, yoga played an important role. Thank you for your consideration.

## YOGA AND IT'S IMPORTANCE

Yoga is a Sanskrit word which means "*Union*" or "*to unite*" and spiritual meaning of yoga is union of mind with divine intelligence of the universe. Yoga is a traditional method of meditation developed by the saints of ancient India. They practiced yoga as an effective method of controlling their mind and bodily activities. Yoga in Daily Life is a system of practice consisting of eight levels (*Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, and Samadhi*) of development in the areas of physical, mental, social, and spiritual health.

When the body is physically healthy, the mind is clear, focused and stress is under control. This gives the space to connect with loved ones and maintain socially healthy relationships. When you are healthy you are in touch with your inner Self, with others and your surroundings on a much deeper level, which adds to your spiritual health.

Yoga increases the flexibility of the spine, improves body's physical condition and heightened awareness to the importance of relaxation. It has been emphasized that each exercise be practiced slowly, coordinating movement with the breath, pausing motionless in each position and always with full concentration.

Yoga teaches us to focus on breathing while we hold the poses. This attention to breath is calming it dissolves stress and anxiety. Yoga can help cure insomnia, as regular yoga practice leads to better and deeper sleep. Yoga can help fight fatigue and maintain your energy throughout the day. Yoga is an effective treatment for a variety of autoimmune diseases because it can reduce the symptoms these diseases often cause, such as stiffness, malaise, fatigue, and weakness. Even children can benefit from yoga. Those with attention deficit disorder and hyperactivity can learn to relax and get control by using yoga breathing and yoga asanas. Yoga has been used to help heal victims of torture or other trauma. Because yoga is a form of meditation, it results in a sense of inner peace and purpose, which has far-reaching health benefits.

### A. BENIEFITS OF YOGA ON: PHYSICAL HEALTH

"The relaxation techniques incorporated in yoga can lessen chronic pain, such as lower back pain, arthritis, headaches and carpal tunnel syndrome and can also lower blood pressure and reduce insomnia."

Other physical benefits of yoga include:

1. Increased flexibility
2. Increased muscle strength and tone
3. Improved respiration, energy, and vitality
4. Maintaining a balanced metabolism
5. Weight reduction

6. Cardio and circulatory health
7. Improved athletic performance
8. Protection from injury

## B. MENTAL HEALTH

Yoga can improve balance, flexibility, range-of-motion, and strength. it can also enhance mental health, although these benefits are harder to measure. According to many studies, yoga can:

- a. To Improve anxiety
- b. To Reduce stress
- c. To Increase in both the quality and quantity of the sleep efficiency release helpful brain chemicals (mood boosting chemicals) such as dopamine, serotonin, and norepinephrine
- d. Relieve depression
- e. Enhance social life
- f. Promote other healthy habits also lose weight, stop smoking, and manage chronic disease.
- g. Help in maintaining a positive self-image and positive outlook towards life in general, and help in developing high will power and tolerance (towards self and others)

## C. PSYCHOLOGICAL HEALTH

Yoga is a psychology in itself. Regular yoga practice makes us feel better and enhances our sense of gratitude and well-being. Besides, yoga is becoming increasingly accepted as an adjacent therapy to improve quality of life for individuals, as it offers an excellent opportunity to enter the 'flow state'. Doing regular yoga helps people in:

1. Achieving mindfulness
2. Develops greater self-awareness and tranquility
3. Catapults our ability to focus and remain happy throughout the day
4. Better spiritual and emotional health as well

## SPIRITUAL HEALTH

Spirituality is a broad and vague construct, which can be approached from psychological, philosophical, transcendental-religious, and FEa universal, human-specific phenomenon,

characterized by a search for and a belief in something sacred beyond the material world. It also refers to the subjective experience of a sense of truth, wholeness, and openness to the infinite.

1. It heals your body and your mind
2. It teaches you to be okay with stillness and surrender to the present
3. It reminds you of compassion

## EFFECT OF YOGIC EXERCISES ON OBESITY

The word obesity is derived from the Greek words 'ab' meaning excess and 'edere' meaning overeating. It is a condition in which there is an imbalance between the eating of food and consumption of the food, resulting the eating in increase in weight. Strictly speaking obesity is a state in which excess fat accumulates and deposit itself in various parts of the body, thus increasing in weight. Obesity is defined as an excess of adipose tissue. It is a condition in which there is an imbalance between the eating of food and consumption of the food resulting in increase in weight. Yoga can play a very important role if you wish to treat obesity successfully and effectively.

Table 1: Overweight & Obesity classification according to Body

Mass Index (BMI)

WHO CLASSIFICATION OF WEIGHT STATUS	
WEIGHT STATUS	BODY MASS INDEX (BMI), kg/m <sup>2</sup>
Underweight	<18.5
Normal range	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	≥ 30
Obese class I	30.0 – 34.9
Obese class II	35.0 – 39.9
Obese class III	≥ 40

Table 2: Name and duration of various yoga asanas & pranayama's included in yogic exercises

Sr No.	Asana position	Name of yoga, asana, pranayama, (duration)
1.	Asana supine	Ardha Halasana (one leg/ both legs)- [30sec], pawan Muktasana (Ardha/ purna)- [30sec], Naukasana (supine) [30sec], Shavasana-[2min]
2.	Asana Prone	Makarasana- [1min], Bhujangasana-[30SEC],Dhanurasana-[30sec], shwansana-[30sec]
3	Asana Sitting	Gomukhasana both sides as per capacity, Yogmudra all- [2 min]
4	Asana Standing	Tadasana-[30 sec], Chakrasana (Lateral)- [30sec]
5	Pranayama	Anuloma-Vilom- [10 rounds]
6	Shuddhi Kriya	Kapala Bhati- [30-30 up to 70-80 strokes]
7	Mantra Chanting	Pranava Japa, Meditation- [10 min]

## YOGA PRACTICES FOR OBESITY

- Shat kriyas
- Yogasanas
- Pranayama
- Bandha-Mudras
- Meditation techniques

### Shat kriyas: -



Shat means 'six' and kriya means 'cleansing'. Yogic kriya remove the waste materials of **our** internal organs which are not expelled normally. Some Shat kriyas are: -

- Kapalbhati

2. Trataka
3. Neti
4. Dhouti
5. Nauli
6. Vasti

For obesity Kapalbhati, Dhouti and Agnisara is beneficial.

### Yogasana: -



Yogasana is a term that, in its narrow definition, describes a seated posture in yoga typically used for medication, such as a basic cross-legged position like Sukhasana (easy pose).

Some Yogasana for obesity:-

1. Bhujangasana (cobra pose)
2. Dhanurasana (bow pose)
3. Kumbhakasana (the plank)
4. Nauksasana (boat pose)
5. Ustrasana (camel pose)

Eka Pada Adho Mukha Svansana (one-legged downward-facing dog pose)

## Pranayama: -



Pranayama is the practice of breath regulation. It's a main component of yoga, an exercise for physical and mental wellness. In Sanskrit, "prana" means life an energy and "Yama" means control. The practice of pranayama involves breathing exercises and patterns. Some pranayama for obesity are: -

Bhastrika

Surya Bhedana

## Bandha-Mudras: -



A Bandha is a lock or bind in yoga, which is performed in order to direct and regulate the flow of prana (life force energy) to certain parts of the body. Also referred to as an energetic lock, bandha was practiced by yogis of the past to promote energy flow and maintain optimum health. Mudra means "gesture or attitude". It is defined as "*mudam anandam datati iti mudra*" means the actions that gives us pleasure, bliss is called mudra.

Some Bandha-Mudra for obesity

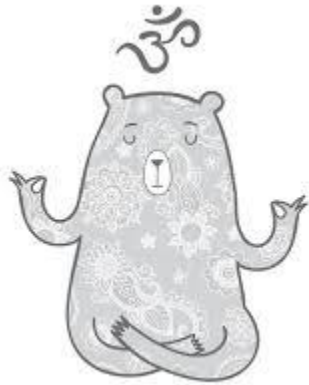
Jalandhara Bandha

Uddiyana Bandha

Viparitanakarani Mudra



## Meditation techniques: -



Meditation is a way to relieve stress at the mental level and help us have a healthy mind.

Some meditation technique for obesity: -

OM Chanting

Soham Meditation

## HYPOTHESIS

(i) There will be significant difference between pre and posttest condition of experimental group on

weight loss.

(ii) Control and Experimental group are likely to differ on weight loss.

## METHODOLOGY

In the present study 40 obese subject were selected and was divided into the equal groups of 20 subjects each. One group was as an experimental group & one was control group. The training of yogic exercise was given to experimental group and the control group was not given any kind of yogic exercise. The yogic training program of 42 days was organized for 30 minutes daily. The tests were conducted on two occasions, once before the training of yogic training & second after completion of training of yogic training. After the completion of training the weight of subjects of experimental & control groups were compared and results were statistically analyzed.

Sr. No	Name of groups	No. of subject	Exercise given
1	Experimental	20	Yogic exercises
2	Control	20	Nil
Total	-	40	-

These groups were pre and post tested for the selected variables i.e. is weight

## SAMPLING

In the present study, a group of 40 obese/overweight female students were selected. The range of the age group was above twenty years. These 40 subjects equally divided to two groups each group consists of 20 subjects. The nature of the sample is stratified random sampling. The study was confined to obese subject who were equal to or more than 5 kg overweight.

## RESEARCH TOOL

Electrical weight machine

Measuring tape

## RESULT

After collection of data the results obtained through the pertinent statistical analysis. Because the data has no utility unless, they are interpreted by the statistical techniques. The obtained data was analyzed by applying ANCOVA as given below:

Table – 1

Descriptive analysis of Experimental and Control Group Measured in Post testing on Weight

Groups	Observed Mean	Adjusted Mean	N
Control group	60.03	60.08	20
Experimental Group	55.98	55.94	20

Table 1 indicates that the mean value of experimental group and control group during posttest were 55.98 and 60.03 respectively. Further it shows that the adjusted mean scores of the students of Experimental Group during the post test on weight is 55.94, the adjusted mean scores of the female students of Control Group during the post test on weight is 60.08, these

values are different from that of the observed mean values, this shows that the effect of covariant (Pre-Test) is eliminated in comparing the effectiveness of the treatment in the post testing.

Table – 2  
Analysis of Co-variance the Post Test Data on Weight

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Pre Weight	2.51	1	2.51	2.03	.162
Group	171.12	1	171.12	134.6	.001
Error	47.04	37	1.27		
Total	218.15	38			
Corrected Total	47.04	37			

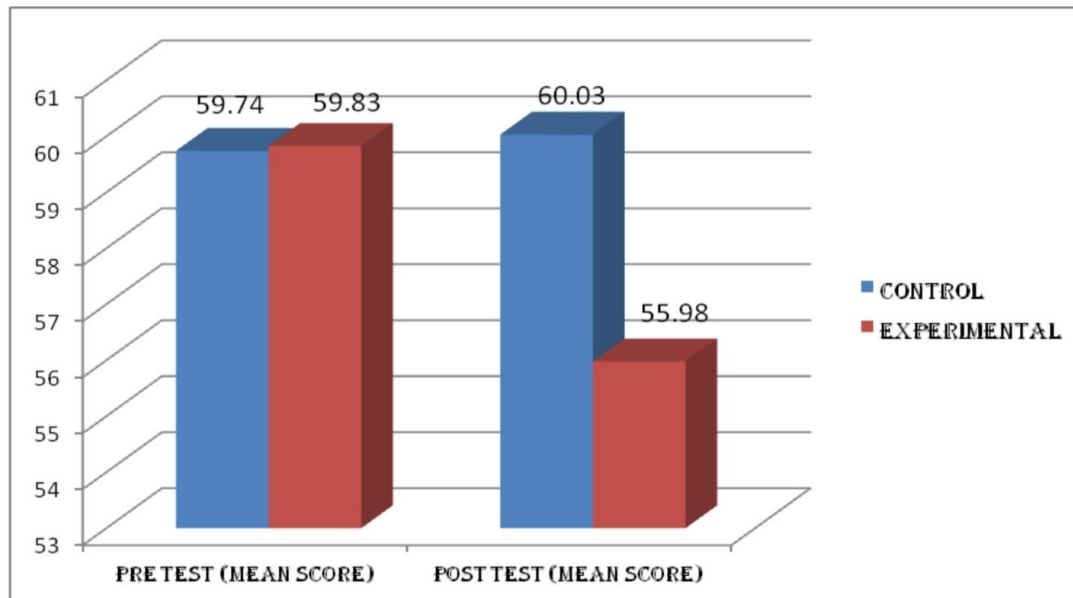
a. R Squared = .97 (Adjusted R Squared = .94)

Table no 2 shows that the f - value is 134.60 after comparing the adjusted mean of both groups of the students during the post test on weight. The f-value 134.60 is significant at 0.05 level of significance, with the degree of freedom (1, 37). Hence both groups differ significantly on weight at post testing i.e., after the yogic training. Since the mean scores of the female students of experimental group is 55.94 which is lower than the mean scores of the female students of control group 60.08. It may therefore be said that the group given yogic training has significantly reduce weight as compared to reduction in weight of the group not given yogic training. Based on above findings, it can be concluded that yogic exercises have facilitative effect on weight loss.

### Graphic presentation: -

Graph shows the comparison of pre and post mean scores of experimental group and control group on weight. It signifies, there is greater reduction in weight due to 42 days yogic training program. It shows a great reduction in weight of subjects of experimental group i.e., 4.05 kg, while in control group increase 0.29 kg in 20 subjects. Hence it is clear that yogic exercises are better and effective training program for reducing weight.

Graph No 1



Comparison of Mean Scores of Control and Experimental Group on Weight (kg)

## Yoga practice characteristics

Yoga Practice Variable	n	M (SD)	Median	Range
Years of practice	1045	11.4 (7.5)*	11.0	0 – 25+
Classes/month	1045	6.1 (5.1)	4.0	0–28
Class length in minutes	926	89.1 (15.2)	90.0	0–180
Students per class	926	13.3 (6.9)	12.0	1–50
Practice days/month	1045	12.2 (9.7)	12.0	0–28
Minutes of practice/typical day	923	43.7 (30.6)	30.0	1–180

Yoga Practice Variable	n	M (SD)	Median	Range
Minutes per day of practice (by type) <sup>**</sup>				
Standing poses	1017	23.0 (13.9)	20.0	1–90
Vigorous poses	897	21.9 (16.5)	20.0	1–90
Inversions	908	9.4 (7.2)	8.0	1–60
Gentle poses	1020	21.1 (21.3)	15.0	1–120
Breath work	744	17.5 (14.1)	15.0	1–90
Meditation	657	17.5 (14.5)	15.0	1–120
	Frequency		Percent	

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 Philosophy study

Never	274	26.2
< once per month	394	37.7
1–8 times per month	269	25.7
≥ 3 times per week	107	10.4

## Style of Yoga Practiced

Yoga Practice Variable	n	M (SD)	Median	Range
Iyengar only		819		78.4
Iyengar and 1+ other style		161		15.4
Unknown/Other style		65		6.2

## DISCUSSION:

In totality the finding of present study provides ample support to the conclusion that the regular practice of yogic exercises burns more calories and helpful in reducing the weight of obese persons. These results can be supported by the studies e.g., Colorado State University has proved that anaerobic exercise burns more than five times more calories than aerobic exercise. Also, aerobic exercises can typically burn 25% muscle and 75% fat for body energy but anaerobic, exercise burns 100% fat for body energy. It's also proved that one hour of anaerobic exercise i.e., yogic exercises are worth more than five hours of aerobic exercise to burn calories and fat.

## MAIN FINDINGS: -

The main findings of present study can be summarized as under:

Yogic exercises significantly reduce the body weight.

## CONCLUSION:

So, the present study shows that the regular practice of yogic exercises has reduced to a great extent the weight and improves their performance of female students. Practically speaking yoga is a science which deals with the health of the body and harmony of mind. It is right to say that yoga is a way of healthy life

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