

Role of Yogic Exercises in Reduction of Body Weight and BMI Level

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ABSTRACT

The major cause of obesity is our poor lifestyle. Obesity leads to many health problems. More than half of the population of our country is considered obese today. Genetic and environment factors can contribute to obesity, but undoubtedly our lifestyle also plays a big role. If an individual have been gaining pounds lately, then chances are that our lifestyle could be cause of weight gain. Obesity does not just happen overnight rather it develops gradually from improper diet and poor lifestyle choices of an individual. In our study, 50 male subjects were selected randomly who are coming in for yoga practice at Municipality Gandhi Park, Baraut (Baghpat), Uttar Pradesh. Most subjects are in the range from 40 to 55 years where maximum subjects are coming to park for the morning walk and some general physical exercise for maintain their daily routine. Data are collected on the selected subjects such as heights (in m) and body weight by using standardized instruments and was recorded in kg. The BMI was calculated by standard BMI formula, devised in the 1830s by Lambert Adolphe Jacques Quetelet, a Belgian astronomer, mathematician, statistician and sociologist. It aims to estimate whether a person has a healthy weight to height ratio by dividing their weight in kilograms (kg) by their height in metres squared. The correlation method was used to find out the correlation between yogic exercises like paranayam and body weight and BMI of subjects. The positive correlations are found between yogic exercises and reduction of the body weight of the subjects. There is also positive correlation between yogic exercises and reduction of the BMI level of subjects.

Keywords: Obesity, Body weight, Body Mass Index (BMI), Exercises, Yoga.

I. INTRODUCTION

Purpose of Study:- The purpose of study is to investigate the correlation between reducing or manage body weight ('Obesity') and BMI through Yogic exercises.

Meaning of Yoga:- Yoga does not only deal with the physical health of an individual. It is a discipline based on ancient Hindu tradition which is concerned with integrating the physical and spiritual as well as mental well-being of a person. In fact, yoga is a term that loosely translates to "unite". Proponents believe that the preparatory prerequisite to accomplishing a higher state of consciousness is a healthy and balanced state of mind and body. Asana is a simple and economical preventive measure that can help in treating or control most non-communicable universal occupational problem like obesity and improving the health of an individual.

Meaning of Obesity: Obesity means excess body weight in relation with height of a person after due consideration of the physical built of the person. That is a condition where a person has accumulated so much body fat that it might have a negative effect on his or her health. If a person's bodyweight is at least 20% higher than it should be, he or she is considered obese. Obesity is the condition, when the body weight exceeds the requisite normal weight. Accumulation of fat deposits in the body tissues results in obesity. When a person starts eating beyond a normal limit set before him, imbalance sets in.

An obese person has accumulated so much body fat that it might have a negative effect on their health. If a person's bodyweight is at least 20% higher than it should be, he or she is considered obese.

The BMI is a statistical measurement derived from your height and weight. Formula is:

Body Mass Index (BMI) = weight (kg) / [height (m)]²

Obesity is a physical condition in which a person has accumulated so much body fat that it might have a negative effect on an individual health.

Symptoms of Obesity

- Obesity increases body weight, reduces physical movements, and also brings in slowness in emotional and mental activities.
- Quantity of food intake increases.
- Obesity can result in frustration.
- Laziness increases, reducing overall efficiency.
- Sometimes obesity can create obstruction to breathing process.
- Obesity may result in heart problems, diabetes or blood pressure.

Methodology:

- First we recorded height and weight of the subjects and calculated the BMI and pre-test conducted for their BMI categories.

Obesity has become a universal problem. The problem with obesity is that exposes the person or individual to potential serious health risks i.e. arthritis, hypertension, cancer, flat foot, respiratory diseases, liver problems, diabetes, etc. The following are the methods to prevent and manage obesity by an individual i.e. Regular Exercise, Avoid Eating Regularly, Avoid Drinking too much Alcohol. Proper necessary diet according to the nature of activity and including practice of following some yogic Asana or exercises for 5-days a week for three months according to their capacity of the body:

- Veer-bhadra-sana
- Surya Namaskara
- Ardha Mat-syendra-sana
- Tada-sana
- Mat-sya-sana
- Bhujanga-sana
- Sava-sana
- Kapala-bhati and Anulom-Vilomha

After subjects participated 5-days a week for three month of yogic exercises, all parameters of our observation are measured again recording heights and weights of the subjects and calculated the body weight and BMI for the study.

Data Analysis:

	Mean Age	Mean Height	Mean Weight	Correlation	BMI	Correlation
Before Yogic Exercises	49.45	166.58	71.89	0.099 Approx-1	25.9	0.099 Approx-1
After Yogic Exercises			68.51		24.72	

N=50 (N= Number of subjects taken for purposes of study)**Conclusion:**

The problem of Obesity is increasing globally due to changing lifestyle with rapid industrialization as well as urbanization. Yogic asanas, which should be followed for reducing body weight (obesity) and Body Mass Index level, listed above seem to have positive effect on overall health of subjects. Regular practice of Yoga exercises and paranayam not only helps in better metabolism but it also regulates the digestive process. The better digestion and assimilation of nutrients in the body, better will be excretion of waste products from the body resulting to better regulation of physiology of our body.

In Above Table

There is positive correlation found between yogic exercises and management in reducing body weight of the subjects.

In Above Table

There is positive correlation found between yogic exercises and reducing the BMI level of subjects.

Yoga asanas help to achieve control over mind and behavior and then the individual can easily control their food habits and change their lifestyle to reduce the body weight (obesity). There is significant reduction in the general body weight and also BMI of the subjects. The present study shows a significant reduction in the body weight and the level of BMI of subjects only based on Yogic Exercises (Asana and Pranayama). Yogic exercises have diverse effect on obesity, which is permanent in nature than other methods for obesity reduction.

Suggestions:

- Above study also useful on female subjects of every age group, who have tendency towards the obesity or excess body weight.
- Above study also useful on children of every age group, who have tendency towards the obesity or excess body weight.
- Above study also useful on officers who have tendency towards the obesity or excess body weight due to the long sitting hours for their work.

Lastly, I would like to say that if yogic exercises performed on a regular basis in a disciplined manner with their diet control, it can enhance the overall quality of life. Yoga has been the elixir of a healthy life through ages and generations and is at the very foundation of the Vedic blessing, 'Jeevate Sharadah Shatam'.

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