Academic Sports Scholars
International Online Physical Education & Sports Research Journal

ISSN: 2277-3665 Impact Factor : 2.9052(UIF) Volume - 5 | Issue - 2 | Feb - 2016

OBESITY AND YOGIC PRACTICE

Harish Kumar
P.E.T., Directorate of Education GNCT, New Delhi.

Abstract :

Obesity in India Obesity is the accumulation of body fat to the level which might have a negative effect on health. A person having body weight at least 20% higher than it should be is considered obese. In India also, obesity has reached an epidemic proportion, affecting 5% of the country's population. Forty school boys in the age group of 12 to 15 years were selected from G.B.S.S.J.J-COLONY Nangloi (Delhi) by using simple random sampling methods subjects for this study. Two groups were made each comprising of twenty subjects. These subjects participated voluntarily in this study. After initial tests of the subjects, they were divided in two homogeneous groups by equating their performance. Yogic practice programme was administered to the experimental group whereas no treatment was given to control group. The findings of statistical analysis that Body Mass index was significantly reduced due to the influences of Yogic practice for a period of one month.

KEYWORD:- *Obesity, yogic activities, B.M.I*

INTRODUCTION:

Obesity in India Obesity is the accumulation of body fat to the level which might have a negative effect on health. A person having body weight at least 20% higher than it should be is considered obese. In India also, obesity has reached an epidemic proportion, affecting 5% of the country's population. Following India's continued integration in global food markets; unhealthy, processed food has become much more accessible. Indian urban population is experiencing high rates of obesity, as their work often demands less physical exertion. Even rural areas are not immune because of increased mechanization of farming activity leading to reduced physical activity. Indians are genetically susceptible to weight accumulation especially around the waist.

According to the National Family Health Survey (NFHS), the percentage of ever-married women aged 15-49 years who are overweight or obese increased from 11% in NFHS- 2 to 15% in NFHS-3. Under nutrition is more prevalent in rural areas, whereas overweight and obesity are more than three times higher in urban areas. This may be due to lesser physical activity in the urban areas. Furthermore, under nutrition and overweight/obesity are both higher for women than men. This dual disease pattern in women may have an endocrine basis, but more probably has its roots in societal and cultural mores, which prevent women from leading a healthy lifestyle. The prevalence of overweight and obesity is three times higher among women with 12 or more years of schooling than those with no education.

The percentage of women who are overweight or obese is highest in Punjab (30%), followed by Kerala (28%) and Delhi (26%), all of which are relatively richer states.

States	Male (%)	Male rank	Female (%)	Female rank
Punjab	30.3	1	37.5	1
Kerala	24.3	2	34	2
Goa	20.8	3	27	3
Tamil Nadu	19.8	4	24.4	4
Andhra Pradesh	17.6	5	22.7	10
Sikkim	17.3	6	21	8
Mizoram	16.9	7	20.3	17
Himachal Pradesh	16	8	19.5	12
Maharashtra	15.9	9	18.1	13
Gujarat	15.4	10	17.7	7
Haryana	14.4	11	17.6	6
Karnataka	14	12	17.3	9
Manipur	13.4	13	17.1	11
India	12.1	14	16	15
Uttarakhand	11.4	15	14.8	14
Arunachal Pradesh	10.6	16	12.5	19
Uttar Pradesh	9.9	17	12	18
Jammu and Kashmir	8.7	18	11.1	5
Bihar	8.5	19	10.5	29
Nagaland	8.4	20	10.2	22
Rajasthan	8.4	20	9	20
Meghalaya	8.2	22	8.9	26
Orissa	6.9	23	8.6	25
Assam	6.7	24	7.8	21
Chattisgarh	6.5	25	7.6	27
West Bengal	6.1	26	7.1	16
Madhya Pradesh	5.4	27	6.7	23
Jharkhand	5.3	28	5.9	28
Tripura	5.2	29	5.3	24

Statement of the Problem

The study focuses on the "Effect of Yogic activities on obesity of school students"

Objectives of the Study

The find out the effect of Yogic activities on obesity of school students

Significance of the Study

- it may show the Effect of Yogic activities on obesity of school students
- The study may provide guidance to yoga education teachers, physical education teachers, health instructors, fitness instructors and parents to improve health and fitness through Yogic Asana.
- The study may enrich the knowledge of yoga, yoga therapy and exercise physiology.
- The study may provide guideline for upcoming research scholars for further research.

Selection of Subjects

Forty school boys in the age group of 12 to 16 years were selected from G.B.S.S.J.J-COLONY Nangloi (Delhi) by using simple random sampling method as subjects for this study

Design of Study

Two groups were made each comprising of twenty subjects. These subjects participated

voluntarily in this study. After initial tests of the subjects, they were divided in two homogeneous groups by equating their performance. Yogic practice programme was administered to the experimental group whereas no treatment was given to control group.

S.no	Name of Group	No. of Students	Exercise given
1	Experimental	20	Yogic asana
2	Control	20	Nil
	total	40	

Tools used

Body Mass Index

Body mass index is a measure of a person's weight scaled according to their height. This parameter is useful tool for monitoring your progress in health and fitness. However, it is not accurate in all cases. For example, power athletes may have the same BMI score as an overweight person, even though they are carrying no fat. The reason for this is that the BMI does not account for amount of lean muscle the athlete is carrying. Likewise, many endurance athletes have BMI score indicating that they are underweight, even though they are actually a healthy weight. In older people BMI readings may be of little use, as they will not take into account loss of muscle mass. Neither can the BMI be an accurate measure for children of breastfeeding mothers. However those exceptions aside, the BMI provides a good basic guideline to follow for the general population.

Measuring BMI

Following formula was used to find out the BMI

$$\text{Body Mass Index (BMI)} = \frac{\text{Body Weight (Kg)}}{(\text{Standard Height in Meter})^2}$$

BMI and health risks

Studies show that score is linked to health risk factor. Compare your score with those on the chart below. If your health risk is high or very high, you should consult a doctor and start taking exercise and eating sensibly immediately.

BMI and Health Risks

BMI score	classification	Health risk
Less than 18.5	underweight	moderate
18.5-24.9	normal	very low
25-29.9	overweight	low
30-34.9	obese class 1	moderate
35-39.9	obese class 2	high
Above 40	extreme obesity	very high

Administration of yogic asana practice program

The yogic asana practice was conducted for one month (Monday to Saturday) in a week.

Schedule of Yogic Asana Practice Programme

S. No	Yogic Asana Practice	Pose Maintenance
1	Sukhyam vyam for worming up	5-10 mint
2	Ardha-Chakkarasana (Left Side)	5-15 Seconds
3	Ardha-Chakkarasana (Right Side)	5-15 Seconds
4	Padhastasan	5-15 Seconds
5	Vakrasan (Left Twist)	5-15 Seconds
6	Vakrasan (Left Twist)	5-15 Seconds
7	pashcimotanasana	5-15 Seconds
8	Sarvagasan	5-15 Seconds
9	Halasana	5-15 Seconds
10	Chakkarasana	5-15 Seconds
11	Pawanmukatasana	5-15 Seconds
12	Salabhasana	5-15 Seconds
13	Bhujangasana	5-15 Seconds
14	Uttanpadasana	5-15 Seconds
15	Naukasana	5-15 Seconds
16	Dhanurasana	5-15 Seconds
17	Sawasana	5-10 mints

Analysis of Data and interpretation of Results

The nature of the problem and objectives of the study the researcher to use mean (M), Standard deviation (S.D) and t-test to calculate the comparative effectiveness of yogic practice on experimental and control groups. The hypothesis was tested by calculating the significant difference at 0.05 and 0.01 levels on confidence.

The results of pre and post test conditions of experimental and control group have been presented the table no. 1&2

S.No	Variable	Mean	S.D	Mean	S.D	t-test
1	B.M.I	25.62	1.45	25.24	2.08	0.904

Pre & Post Group Result

S.No	Variable	Mean	S.D	Mean	S.D	t-test
1	B.M.I	24.68	1.44	25.31	1.75	-1.7

t=2.02 is signifint at 0.05 level
t=2.71 is signifint at 0.01 level

CONCLUSION AND DISCUSSION

The findings of statistical analysis that Body Mass index was significantly reduced due to the influences of Yogic practice for a period of one month.

REFERENCES

1. Lakshmikandhan.s, and Elangovan National yoga week -2013.Morarji Desai National institute of Yoga, New delhi.page no.249-252
2. Janet W Rich-Edwards .et.al. Longitudinal study of birth weight and adult body mass index in predicting risk of coronary heart disease and stroke in women BMJ 2005; 330.
3. Patil.SD (2013) National yoga week -2013.Morarji Desai National institute of Yoga, New delhi.page no.224

4. Shukla.NB (2013) National yoga week -2013.Morarji Desai National institute of Yoga, New delhi.page no.197
5. SRIVASTAVA SHILPEE, (2009) National Family Health Survey, International Institute for Population Sciences, CURRENT SCIENCE, VOL. 97, NO. 12,
6. Susan (2004) "The Relationship between Body Mass Index and Health-Related Quality of Life" Outcomes Research Group Centre for Health Economics Alcuin College, University of York Heslington, York, YO10 5DD, August 2004
7 . http://www.jmnn.org/article.asp,issn=2278,1870,year=2012,volume=1,issue=1,spage=37,epage=41,aulast=Kalra

Harish Kumar
P.E.T., Directorate of Education GNCT, New Delhi.