

Effect On Hatha Yogic Sadhana With And Without Diet Counseling On Dining Habits Among Obese Children

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ABSTRACT

The purpose of the study was to found the effect on hatha yogic sadhana with and without diet counseling on dining habits among obese children. The study was conducted on 90 obese children and they are divided into three equal groups of 30 each. Group – I as Control group, Group –II as Hatha yoga sadhana with diet counseling and Group – III as Hatha yoga sadhana without diet counseling. Experimental group underwent 25 weeks practice in Hatha yoga sadhana with and without diet counseling whereas the control group did not underwent any of the yogic practice. The dining habits were measured before and after the experimentation. The data were analysed by Analysis of Covariance (ANCOVA) and it was concluded that the hatha yoga sadhana with diet counseling, hatha yoga sadhana without diet counseling had significant ($P < 0.05$) effect on the dining habits level.

Key Words: *Hatha yoga sadhana, Dining Habits, Obesity, Diet*

INTRODUCTION

Obesity will increase the probability of varied diseases, notably cardiovascular disease, sort a pair of polygenic disorder, clogging apnea, bound kinds of cancer, and osteoarthritis (Haslam DW, 2005). Obesity is most ordinarily caused by a mix of excessive food energy intake, lack of physical activity, and genetic status, though some cases area unit caused primarily by genes, endocrine disorders, medications, or psychiatric illness. Evidence to support the read that some weighty folks eat very little nevertheless gain weight because of a slow metabolism is restricted. On average, obese people have greater energy expenditure than their thin counterparts due to the energy required to maintain an increased body mass (Kushner, 2007).

The health standing is typically measured in terms of expectancy at birth, death rate rate, fertility, crude birth rate and crude death rate. These indicators of health are determined by numerous factors such as per capita income, nutrition, housing, sanitation, safe drinking water, social infrastructure, health and medical care services provided by government, geographical climate, employment status, incidence of poverty and the like (Reddy and Selvaraju 1994).

Advertising of unhealthy foods correlates with childhood obesity rates. In some nations, advertising of candy, cereal, and fast-food restaurants is illegal or limited on children's television channels. (Lobstein, 2005) The media defends itself by blaming the parents for yielding to their children's demands for unhealthy foods.

Childhood blubber could be a condition wherever excess body fat negatively affects a child's health or well-being. As strategies to work out body fat directly area unit tough, the diagnosis of obesity is often based on BMI. Due to the rising prevalence of blubber in youngsters and its several adverse health effects it's being recognized as a heavy public health concern. The term overweight instead of weighty is commonly employed in youngsters because it is a smaller amount stigmatizing. The first issues to occur in weighty youngsters area unit typically emotional or psychological. Childhood blubber but may also cause serious

conditions together with polygenic disorder, high blood pressure, heart disease, sleep problems, cancer, and other disorders. Some of the opposite disorders would come with disease, early puberty or menarche, eating disorders such as anorexia and bulimia, skin infections, and asthma and other respiratory problems. Studies have shown that overweight children are more likely to grow up to be overweight adults. Obesity during adolescence has been found to increase mortality rates during adulthood. (Bessesen DH, 2008)

Calorie-rich drinks and foods are unit promptly accessible to youngsters. Consumption of sugar-laden soft drinks could contribute to childhood obesity. In a study of 548 youngsters over a one-year amount the probability of obesity hyperbolic 1.6 times for every additional soft drink consumed per day. Calorie-dense, prepared snacks are available in many locations frequented by children. As childhood obesity has become additional prevailing, snack vending machines in school settings have been reduced by law in a small number of localities. Some research suggests that the increase in availability of junk foods in schools can account for about one-fifth of the increase in average BMI among adolescents over the last decade. Eating at fast-food restaurants is extremely common among tykes with seventy-fifth of seventh to twelfth grade students intense fast-food consumption in a very given week. (French SA, 2001) The fast food industry is also at fault for the rise in childhood obesity.

The purpose of the study is to find out the effect on hatha yogic sadhana with and without diet counseling on dining habits among obese children.

METHODOLOGY

The purpose of the study was to find out the effect on hatha yogic sadhana with and without diet counseling on dining habits among obese children. For the purpose of this study, ninety obese children were chosen on random basis from Chennai only. Their age group ranges from 8 to 12 years. The subjects were divided into three groups of thirty each. The Group-I Control group did not undergo any yogic practice, Group-II underwent Hatha yogic sadhana with diet counseling, Group-III underwent Hatha yogic sadhana without diet counseling. The pre tests and post tests were conducted before and after the yoga practice. The practice was given for 25 weeks. The collected data were statistically analyzed by using analysis of covariance (ANCOVA).

Practicing Schedule

Table – I: Hatha Yogic Sadhana with Diet Counseling

S. No	Hatha Yoga Sadhana	Repetition/Mins
1	Pawanamuktasana (Loosening) a. Janu Naman b. Janu Chakra c. Ardha Titali Asana d. Poorna Titali Asana	3/10
2	Asanas (Postures) a. Utthanapadasana b. Supta Pawanamuktasana c. Paschimotasana d. Vajrasana e. Ardha Matseyendrasana f. Kati Chakrasana g. Bujangasana	3/30

	h. Navasana i. Naukasana j. Dhanurasana	
3	Relaxation (QRT)	10
4	Pranayama (Breathing) a. Kapalabathi b. Surya Nadi c. Anuloma Viloma	2/10

Diet counseling for the children's and the parents conducted monthly once to give the awareness about the nutritious food and to monitor the children's food intake during the practice period of 25 weeks (6 months).

Table – II: Hatha Yogic Sadhana without Diet Counseling

S. No	Hatha Yoga Sadhana	Repetition/Mins
1	Pawanamuktasana (Loosening) e. Janu Naman f. Janu Chakra g. Ardha Titali Asana h. Poorna Titali Asana	3/10
2	Asanas (Postures) k. Utthanapadasana l. Supta Pawanamuktasana m. Paschimotasana n. Vajrasana o. Ardha Matseyendrasana p. Kati Chakrasana q. Bujangasana r. Navasana s. Naukasana t. Dhanurasana	3/30
3	Relaxation (QRT)	10
4	Pranayama (Breathing) d. Kapalabathi e. Surya Nadi f. Anuloma Viloma	2/10

RESULTS

The statistical analysis comparing initial and final means of the dining habits due to Hatha Yogic Sadhana with and without diet counseling among obese children is presented in Table-III.

Table-III: Computation of Analysis of Covariance of Pre-Test, Post-Test and Adjusted Post-Test on Dining Habits of Hatha Yogic Sadhana with and without Diet Counseling among Obese Children

	Control Group	Hatha Yogic Sadhana with Diet Counseling	Hatha Yogic Sadhana without Diet Counseling	Source of Variance	Sum of Squares	df	Mean Squares	Obtained F
Pre Test Mean	35.2	35.23	35.20	B	0.02	2	0.01	0.0002
				W	4110.96	87	47.25	
Post Test Mean	35.16	63.93	55.13	B	1336.29	2	6518.14	259.94*
				W	2181.50	87	25.07	
Adjusted Post Test Mean	35.17	63.93	55.13	B	13.33.88	2	6516.94	261.31*
				W	2144.75	86	24.93	
Mean Diff	0.04	28.7	19.93					

*Significant at 0.05 level Table F-ratio at 0.05 level of confidence for 2 and 87(df) =3.10, 2 and 86(df) =3.10.

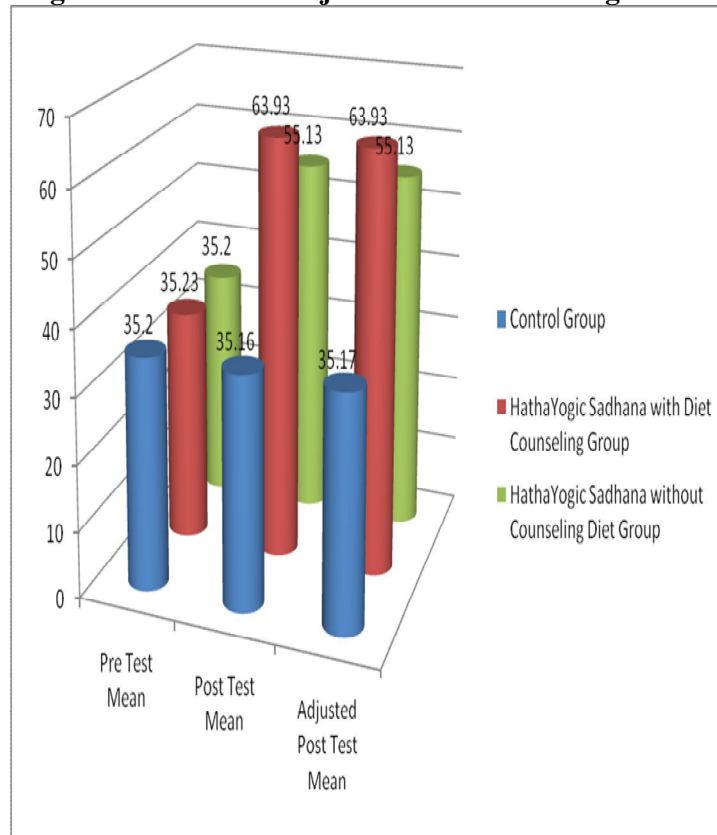
Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe’s Confidence Interval Test. The results were presented in the Table-IV.

Table – IV: Ordered Adjusted Dining Habits, Difference between Means and Scheffe’s Post-Hoc Test F-Ratio of Control Group, Hatha Yogic Sadhana with Diet Counseling and Hatha Yogic Sadhana without Diet Counseling

Control Group	Hatha Yogic Sadhana with Diet Counseling	Hatha Yogic Sadhana without Diet Counseling	Mean Difference	Required C.I
--	63.93	55.13	8.7*	3.74
35.17	63.93	--	28.76*	3.74
35.17	--	55.13	19.96*	3.74

* Significant at 0.05 level

Figure – I: Bar Diagram on Ordered Adjusted Means of Dining Habits



DISCUSSION

Hence, taking into consideration of the pre test means, post test means and adjusted post test means were determined and analysis of covariance was done and the obtained F value 261.31 was greater than the required value of 3.10 and hence it was accepted that the hatha yogic sadhana with diet counseling and the hatha yogic sadhana without diet counseling significantly improved the dining habits of the obese children.

The post hoc analysis of obtained ordered adjusted means proved that there was significant difference existed between hatha yogic sadhana with diet counseling and control group, hatha yogic sadhana without diet counseling and control group on dining habits. This proved that due to twenty five weeks of hatha yogic sadhana with diet counseling and hatha yogic sadhana without diet counseling on dining habits was significantly improved among obese children.

The analysis of co-variance of dining habits indicated that group I Control group and group II (hatha yogic sadhana with diet counseling) and group III (hatha yogic sadhana without diet counseling) were significant difference on the dining habits. It may be due to the effect on hatha yogic sadhana with and without diet counseling. The findings of the study showed that the group II (hatha yogic sadhana with diet counseling) had improved the dining habits more than group III (hatha yogic sadhana without diet counseling). Nearly everything in life requires balance. Hatha Yoga Sadhana and Diet on its own is a good step towards a healthy lifestyle. However, as individual, it is important to understand that we need to work on our body as well as our mind. We can use Hatha yoga sadhana and diet not only as part of a program to reduce the dining habits, but also as a way to assist in attaining other goals.

CONCLUSION

The result of the study indicated that due to the effect on hatha yogic sadhana with and without diet counseling the dining habits of the obese children has significantly changed. The findings of the study also showed that the hatha yogic sadhana with diet counseling had improved the dining habits more than the hatha yogic sadhana without diet counseling.

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