### EFFECT OF YOGA PRACTICES ON BODY MASS INDEX FOR ADVANCED TEACHER TRAINING INTERNATIONAL STUDENTS.

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#### ABSTRACT

The purpose of the study was to investigate the effect of yoga practices on body mass index for Advanced Teacher training International Students. The subject were 100 International students stayed in kerala, South India. The age of the subject ranged from 20-25 years. The subjects were selected randomly from Advanced teacher training course students .Before started yoga practice body mass index was measured with help of digital height and weight machine for measuring body mass index(BMI). After Thirty days Advanced Yoga Training: Starting prayer, Pranayama, Meditation, Suriya namaskar, and Asanas. Again same measurement was taken. The data was Analyzed by applying paired t-test and descriptive statistical technique and product movement correlation was employed to observed the mean (M), Standard deviation (SD) and other parameters. The analysis of data was worked out by using the IBM-SPSS version 20. The level of significant was set at 0.05. The findings of the present study have indicated that yoga practices gave significant reduction on body mass index for advanced teacher training for international students.

Keywords: Body Mass Index, yoga practices, Asanas, Pranayama, Meditation.

#### INTRODUCTION

A 3,000 year old tradition, yoga, is now regarded in the Western world as a holistic approach to health and is classified by the National Institutes of

Health as a form of Complementary and Alternative Medicine (CAM).[

.Williams et al., 2003] The word "yoga" comes from a Sanskrit root "yuj" which means union, or yoke, to join, and to direct and concentrate one's attention.[. Lasater and Raub 2002] Regular practice of yoga promotes strength, endurance, flexibility and facilitates characteristics of friendliness, compassion, and greater self-control, while cultivating a sense of calmness and well-being.[Collins & Mc Call] Sustained practice also leads to important outcomes such as changes in life perspective, selfawareness and an improved sense of energy to live life fully and with genuine enjoyment.[ Desikachar& Atkinson] The practice of yoga produces a physiological state opposite to that of the flight-or-fight stress response and with that interruption in the stress response, a sense of balance and union between the mind and body can be achieved.[ Arora S, Bhattacharjee 2008]

Yoga is a form of mind-body fitness that involves a combination of muscular activity and an internally directed mindful focus on awareness of the self, the breath, and energy.[Collins C. (1998)] Four basic principles underlie the teachings and practices of yoga's healing system.[Desikachar 2005] The first principle is the human body is a holistic entity comprised of various interrelated dimensions inseparable from one another and the health or illness of any one dimension affects the other dimensions. The second principle is individuals and their needs are unique and therefore must be approached in a way that acknowledges this individuality and their practice must be tailored accordingly. The third principle is yoga is selfempowering; the student is his or her own healer. Yoga engages the student in the healing process; by playing an active role in their journey toward health, the healing comes from within, instead of from an outside source and a greater sense of autonomy is achieved. The fourth principle is that the quality and state of an individual's mind is crucial to healing. When the individual has a positive mind-state healing happens more quickly, whereas if the mind-state is negative, healing may be prolonged.

Yoga philosophy and practice were first described by Patanjali in the classic text, *Yoga Sutras*, which is widely acknowledged as the authoritative text on yoga.[Lasater&Desikachar] Today, many people identify yoga only with asana, the physical practice of yoga, but asana is just one of the many tools used for healing the individual; only three of the 196 sutras mention asana and the remainder of the text discusses the other components of yoga including conscious breathing, meditation, lifestyle and diet changes, visualization and the use of sound, among many others. In *Yoga Sutras*, Patanjali outlines an eightfold path to awareness and enlightenment called *ashtanga*, which literally means "eight limbs".[Maehle G 2006]

The eight limbs are comprised of ethical principles for living a meaningful and purposeful life; serving as a prescription for moral and ethical conduct and selfdiscipline, they direct attention towards one's health while acknowledging the spiritual aspects of one's nature. Any of the eight limbs may be used separately, but

within yoga philosophy the physical postures and breathing exercises prepare the mind and body for meditation and spiritual development. Based on Patanjali's eight limbs, many different yogic disciplines have been developed. Each has its own technique for preventing and treating disease. In the Western world, the most common aspects of yoga practiced are the physical postures and breathing practices of Hatha yoga and meditation(Collins C. 1998). Hatha yoga enhances the capacity of the physical body through the use of a series of body postures, movements (asanas), and breathing techniques (pranayama). The breathing techniques of Hatha yoga focus on conscious prolongation of inhalation, breath retention, and exhalation. It is through the unification of the physical body, breath, and concentration, while performing the postures and movements that blockages in the energy channels of the body are cleared and the body energy system becomes more balanced. Although numerous styles of Hatha yoga exist, the majority of studies included in this manuscript utilized the Iyengar style of yoga. The Iyengar method of Hatha yoga is based on the teachings of the yoga master B.K.S. Iyengar. Iyengar yoga places an emphasis on standing poses to develop strength, stability, stamina, concentration and body alignment. Props are utilized to facilitate learning and to adjust poses and instruction is given on how to use yoga to ease various ailments and stressors.

Yoga is recognized as a form of mind-body medicine that integrates an individual's physical, mental and spiritual components to improve aspects of health, particularly stress related illnesses.[ Atkinson 2009] Evidence shows that stress contributes to the etiology of heart disease, cancer, and stroke as well as other chronic conditions and diseases.[ Granath 2006] Due to the fact that stress is implicated in numerous diseases, it is a priority to include a focus on stress management and reduction of negative emotional states in order to reduce the burden of disease. Viewed as a holistic stress management technique, yoga is a form of CAM that produces a physiological sequence of events in the body reducing the stress response. The scientific study of yoga has increased substantially in recent years and many clinical trials have been designed to assess its therapeutic effects and benefits.

As participation rates in mind-body fitness programs such as yoga continue to increase, it is important for health care professionals to be informed about the nature of yoga and the evidence of its many therapeutic effects. Thus, this review of the literature is timely and important and provides information regarding the therapeutic effects of yoga in various populations concerning a multitude of different ailments and conditions. Therapeutic yoga is defined as the application of yoga postures and practice to the treatment of health conditions. Yoga therapy involves instruction in yogic practices and teachings to prevent reduce or alleviate structural, physiological, emotional and spiritual pain, suffering or limitations. Yogic practices enhance muscular strength and body flexibility, promote and improve respiratory and cardiovascular function, promote recovery from and treatment of addiction, reduce stress, anxiety, depression, and chronic pain, improve sleep patterns, and enhance overall well-being and quality of life .(Kissen 2009)

### **RESEARCH METHODOLOGY**

The purpose of the study was to investigate the effect of yoga practices on body mass index for Advanced Teacher training International Students. The subject were

100 International students stayed in kerala, South India. The age of the subject ranged from 20-25 years. The subjects were selected randomly from Advanced teacher training course students.

Before started yoga practice body mass index was measured with help of digital height and weight machine for measuring body mass index (BMI). After Thirty days Advanced Yoga Training: Starting prayer, Pranayama, Meditation, Suriya namaskar, and Asanas. Again same measurement was taken. The data was Analyzed by applying paired t-test and descriptive statistical technique and product movement correlation was employed to observed the mean (M), Standard deviation (SD) and other parameters. The analysis of data was worked out by using the IBM-SPSS version 20. The level of significant was set at 0.05.

### **RESULTS AND FINDINGS**

Table-1

# THE COMPUTATION OF 't' TEST OF BODY MASS INDEX OF ADVANCED TEACHER TRAINING STUDENTS

Test	Mean	S.D	D.M	DM	" t"
Pre Test	21.095	1.55	2.89	1.02	2.83*
Post Test	18.200	1.72			

\*Significant

Level of significant was fixed at 0.05 with degrees of freedom 99 - 1.98

The table-1 shows that body mass index of advanced teacher training students. The pre test mean and standard deviation 21.09 and 1.55.

The post test mean and standard deviation of 18.2 and 1.72. The obtained 't' test value is 2.83 which is greater than table value of 1.98 with df 99. The results of study significantly altered the body mass index of advance teacher training students due to effect of yogic practices.

Figure-1

# THE BAR DIAGRAM SHOWING MEAN VALUES OF BODY MASS INDEX OF ADVANCED TEACHER TRAINING STUDENTS

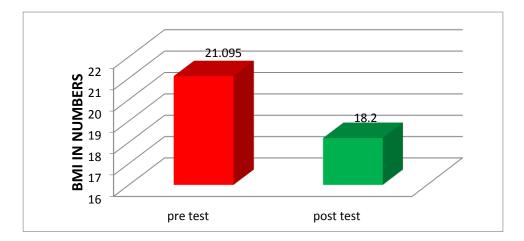


Figure:-1 the bar diagram clearly showing mean values of body mass index of advanced teacher training students significantly reduced their body mass index.

### DISCUSSION ON FINDINGS

Based on results yogic practices on body mass index show significantly reduction of advanced teacher training students. The results line with those effects of yogic therapy BMI was significantly reduced of obese male students (**Suchetha Kumari et al., 2011**). The researcher conducted a study on eight week physical endurance and diet-restriction programme significantly decreases the BMI in 24 obese adolescent boys. (**Benounis et al. (2008**)Similarly, Wong et al. (2008)stated that exercise training significantly changes the BMI. found out three months of yogic exercise such as Asanas and Pranayama (breathing exercises) significantly change the BMI (**Ramesh and Subramaniam 2011**)

### CONCLUSION

Based on statistically proven the following conclusions are drawn

Effect of yogic practices significantly reduced their body mass index of advanced teacher training students.

### IMPLICATIONS AND SIGNIFICANCE

- Now days globally pupil are getting any type disease. Those who are practice the yogaasana and pranayama and meditation the persons get relief from their disease.
- ▶ From child to aged people also practice the yoga according their capacity levels.

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