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FOR ENHANCING HEALTH, FITNESS AND
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Exercise Physiology and Nutrition for Enhancing Health, Fitness and Sports Performance

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postures for prolonged periods. Women are also susceptible to unusually high rates of physical assaults such as rape, burning, and beating.

Impact of Pollution on Women

The smoke from household biomass stoves within a three-hours period is equivalent to smoking 20 packs of cigarettes. A woman spends at least three hours per day in cooking, often in a poorly ventilated area. The impact includes eye problems, respiratory problems and cancer.

Conclusion

The poor health of Indian women is a serious emerging concern at national, state, societal and individual levels. It affects the children who are the next generation of citizens and workers. It reduces productivity, not only at the household level but also in the informal and formal economic sectors. Improving women's health is an integral part of social and economic development. It is economically efficient, if measures are initiated to improve women's healthcare in a most cost-effective manner available at rural level.

Government, NGOs, mass media and public campaign must create health Awareness among women periodically. No family will survive without women being the life partners of men; and the men have the responsibility to look after their partners' health.

Mass communication should be used to improve knowledge and practices related to contraception, safe sex, safe motherhood practices, nutrition, HIV/AIDS prevention, and gender relationships.

Women must be taught the long-term benefits of proper nourishment and self care. A conscious building up of women's health will lead to an increased span of good health for the women, improved child health, and a happy future for the family as a social unit will lead to a development country.

Healthy Women makes Wealthy Nation

Strategies for Change

Improving women's health requires a strong and sustained government commitment, a favourable policy environment, and well-targeted resources. The government's strategy should include balancing the roles of the public and private sectors to minimize resources and to extend care to women whom government programmes do not reach. The public sectors will continue to play a key role in providing services such as family planning, maternity care and control of infectious diseases that promote equity and economic efficiency and confer widespread benefits. However, not all health services – even those that are publicly funded need to be provided by the state. The challenge for the government is to help direct and improve privately provided services through appropriate regulatory arrangements and by encouraging an expansion of their scope to include promotion and prevention, in addition to curative cares.

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EFFECT OF YOGA PRACTICES ON BODY MASS INDEX FOR UNIVERSITY OF JAFFNA STUDENTS.

Dr. K.Ketheeswaran*

ABSTRACT

The purpose of the study was to investigate the effect of yoga practices on body mass index for university of Jaffna Students. The subject were 30 students various departments. The age of the subject ranged from 20-24 years. Before started yoga practice body mass index was measured with help of digital height and weight machine for measuring body mass index (BMI). After twelve weeks Yoga Training: Starting prayer, Pranayama, Meditation, Suriya namaskar, and

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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 university of Jaffna 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, self-awareness 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]

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 university of Jaffna students. The subject were 30 various departments. The age of the subject ranged from 20-24 years. Before started yoga practice body mass index was measured with help of digital height and weight machine for measuring body mass index (BMI). After twelve weeks 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 UNIVERSITY OF JAFFNA STUDENTS.

Test	Mean	S.D	D.M	DM	“ t”
Pre Test	23.095	1.55	2.89	1.02	2.83*
Post Test	20.200	1.72			

*Significant

Level of significant was fixed at 0.05 with degrees of freedom 29 – 1.98

The table-1 shows that body mass index of university of Jaffna students. The pre test mean and standard deviation 23.09 and 1.55. The post test mean and standard deviation of 20.2 and 1.72. The obtained ‘t’ test value is 2.83 which is greater than table value of 1.98 with df 29 The results of study significantly altered the body mass index of university of Jaffna students due to effect of yogic practices.

Figure-1
THE BAR DIAGRAM SHOWING MEAN VALUES OF BODY MASS INDEX OF
JAFFNA UNIVERSITY STUDENTS.

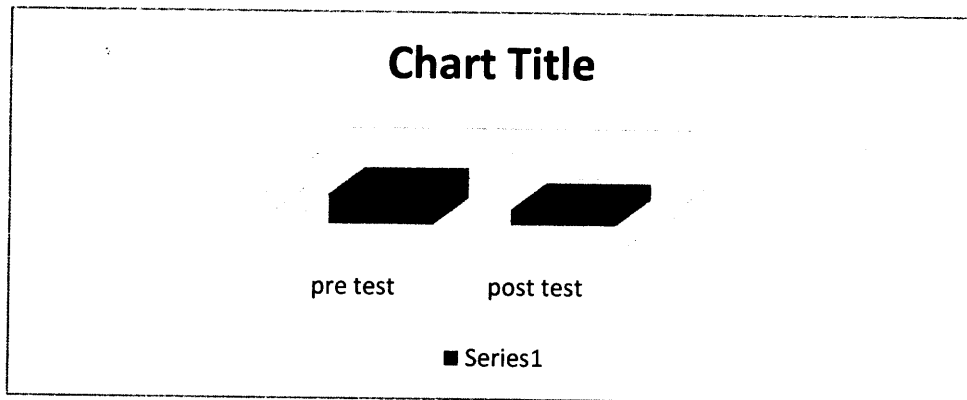


Figure:-1 the bar diagram clearly showing mean values of body mass index of university of Jaffna students significantly reduced their body mass index.

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 university of Jaffna 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.

REFERENCES

- Williams K, Steinberg L, Petronis J.(2003) Therapeutic application of iyengar yoga for healing chronic low back pain. *International Journal of Yoga Therapy*. 13: pp-55-67.
- Lasater J. (1997) The heart of pantajali. *Yoga Journal*. 37pp-134-44.
- Raub JA. (2002) Psychophysiologic effects of hatha yoga on musculoskeletal and cardiopulmonary function: A literature review. *Journal of Alternative Complement Medicine*. 8 pp-797-812.
- Collins C. (1998) Yoga: Intuition, preventive medicine, and treatment. *Journal of Obstet Gynecology Neonatal Nursing*. 27 pp-563-8.
- McCall T. (2007) *Yoga as Medicine*. New York: Bantam Dell a division of Random House Inc.;

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