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FAT PERCENTAGE OF ENGINEERING COLLEGE STUDENTS OF PUNJAB

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Abstract

Purpose of the present study is to find out fat percentage of engineering college students of Punjab. For this study researcher selected (N-500) male engineering college students were used by random sampling method. Complete Body Mass Index test was used to analyze fat percentage among male engineering college students. After analysis of the data results shows that 7.2% found above essential fat & below fitness, 31.4% found at fitness level fitness, 60% found at acceptable level and 1.4% found at obese level.

Key words- Fitness, Obese, Engineering students, fat percentage.

INTRODUCTION

"Physical fitness is one's richest possession; it cannot be purchases, it has to be earned through a daily routine of physical exercises."(Uppal 1992)

We consider health to be simply the absence of disease. Today we view it also as the presence of vitality the ability to function with vigor and to live life actively, energetically, and fully. Vitality comes from wellness, a state of optimal physical, emotional, intellectual, spiritual, interpersonal social, environmental, and even planetary well-being. At all ages and at all levels of physical and mental ability, people can increase their vitality and wellness.

PHYSICAL HEALTH

Optimal physical health requires eating well, exercising, avoiding harmful habits, making responsible decisions about sex, learning and watching for the symptoms of disease, getting regular medical and dental check-ups, and taking steps to prevent injuries at home, on the road, and on the job. The habits one develop and the decisions one make today willdetermine to a great extent not only how many years you will live but also the quality of life one will enjoy during those years.

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EMOTIONAL HEALTH

Optimism, trust, self-esteem, self-acceptance, self-confidence, self-control, satisfying relationships, and an ability to share feeling are just some of the qualities and aspects of emotional wellness. Emotional health is a dynamic state that fluctuates with one's physical, intellectual, spiritual and interpersonal health. Maintaining emotional wellness requires monitoring and exploring one's thoughts and feeling, identifying obstacles to emotional well being and finding solutions to emotional problems, with the help of a therapist if necessary.

SPIRITUAL HEALTH

To enjoy spiritual health is a possess the capacity for love, compassion, forgiveness, altruism, joy, peace, and fulfillment. Spiritual wellness is a state of harmony and balance between oneself and others and between inner needs and the demands of the world. It is an antidote to cynicism, anger, bitterness, fear, anxiety, and pessimism. Organized religions help many people to develop spiritual health. Many other people find meaning and purpose in their lifes on their own, through nature, art, meditation, political action or good works.

INTERPERSONAL AND SOCIAL HEALTH

Satisfying relationships are basic to both physical and emotional health. We need loving, supportive people in our lifes. And we need to be needed by them. Developing interpersonal health means learning good communication skills, developing the capacity for intimacy, and cultivating a support network of caring friends or family members. Social health means participating in and contributing to the community, country and world.

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ENVIRONMENTAL OR PLANETARY HEALTH

Increasingly, personal health depends on the health of the planet. Wellness requires learning about and protecting oneself from environmental hazards and doing what one can to reduce or eliminate them.(Insel and Roth 1994)

PHYSICAL FITNESS

Physical fitness is probably the most popular and frequently used term in physical education and to develop physical fitness is the most important objective of physical educators.

Exercise scientists do not always agree on the components of physical fitness. However, most to agree that the five major component of total health-related physical fitness are:

1. Cardio respiratory endurance
2. Muscular Strength
3. Muscular Endurance
4. Flexibility
5. Body composition. (Powers & DODD1999)

OBESITY

Obesity is a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health, leading to reduced life expectancy and/ or increased health problems. Body mass index (BMI), a measurement which compares weight and height, defines people as overweight (pre-obese) if their BMI is between 25 and 30 kg/m^2, and obese when it is greater than 30 kg/m^2.

Obesity increases the likelihood of various diseases, particularly heart disease, type II diabetes, obstructive sleep apnea, certain types of cancer, and osteoarthritis. Obesity is most commonly caused by a combination of excessive food energy intake, lack of physical activity, and genetic susceptibility, although a few cases

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are caused primarily by genes, endocrine disorders, medications or psychiatric illness. Evidence to support the view that some obsess people eat little yet gain weight due to a slow metabolism is limited; on average obese people have a greater energy expenditure than their thin counterparts due to the energy required to maintain an increased body mass.

Dieting and physical exercise are the mainstays of treatment for obesity. Moreover, it is important to improve diet quality by reducing the consumption of energy-dense foods such as those high in fat and sugar, and by increasing the intake of dietary fiber. To supplement this, or in case of failure, anti-obesity drugs may be taken to reduce appetite or inhibit fat absorption, in severe cases, surgery is performed or an intragastric balloon is placed to reduce stomach volume and/or bowel length, leading to earlier satiation and reduced ability to absorb nutrients from food.

Obesity is a leading preventable cause of death worldwide, with increasing prevalence in adults and children, and authorities view it as one of the most serious public health problems of the 21st century. Obesity is stigmatized in much of the modern world (particularly in the western world), though it was widely perceived as a symbol of wealth and fertility at other times in history, and still is in some parts of the world.

OBESITY BY WHO

Overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health. A crude population measure of obesity is the body mass index (BMI), a person's weight (in kilograms) divided by the square of his or her height (in meters). A person with a BMI of 30 or more is generally considered obese. A person with a BMI equal to or more than 25 is considered overweight.

Overweight and obesity are major risk factors for a number of chronic diseases including diabetes, cardiovascular and cancer. Once considered a problem only in high income countries, overweight and obesity are now dramatically on the rise in low and

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middle income countries, particularly in urban settings.

TYPES OF OBESITY

Two types of obesity are hyperplastic and hypertrophic obesity. According to one hypothesis, the total number of fat cells that an individual has as an adult is determined during the growing years. Fat cell number increases rapidly during the first year of life and again during

METHODOLOGY

For present study researcher selected (N-500) male engineering college students were selected by random sampling method. Complete Body Mass Index test was used to analyze fat percentage among male engineering college students.

puberty. The number of fat cells remains relatively unchanged during adult-hood (Hirsch & knittle, 1970; Sims 1974). Thus, an individual's potential for obesity in terms of fat cell number, is established by late adolescence. Hyperplastic obesity characterized by an abnormal number of fat calls. A normal weight individual has 25 to 30 billion fat cells; whereas an obese person may have as many as 42 to 106 billon fat cells . The hypothesis concerning the development of the number of fat cells has been questioned because an increase in both the number and size of adipose cells has been observed with excessive weight gain in adults. (https://en.wikipedia.org/wiki/Obesity).

Diet and exercise are effective in reducing the size but not the number of fat cell in adults (Hirsch, 1997). Perhaps the key to preventing obesity is to monitor closely dietary intake and energy expenditure, especially during the adolescent growth spurt and puberty. This could potentially retard the development of new fat cells and control the size of existing fat cells.(Heyward 2014)

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DATA ANALYSIS

Table No – 1

Showing percentage wise data of engineering college students 'Fat Percentage' according to norms.

Essential	Above Essential Fat & Below Fitness	Fitness	Acceptable	Obese
Nil	36	157	300	7
Nil	7.20%	31.40%	60%	1.40%

Above table no- 1: showing percentage wise data of engineering college students 'Fat Percentage'. As per table none students were found in essential. 7.2% percent students were found in above essential and below fitness category. 31.4% percent students were found in fitness category. 60% percent students were found in acceptable category. Only 1.4% percent students were found in obese category.

RESULTS

1) 7.2% found Above Essential Fat & Below Fitness.
2) 31.4% found at fitness level Fitness.
3) 60% found at Acceptable level.
4) 1.4% found at obese level.

CONCLUSIONS

To find out the percentage of fat among engineering college students Body Mass index was used after analysis of data results shows 60% were in acceptable category which is the highest. 31.4% students found in fitness level which means those who have less fat percentage than normal. 7.2%

percent students were found above essential Fat & below fitness. Only 1.4% students was found in obese category means those who having more than 30% fat and less than 35% out of their total weight. There was no student found in essential category.

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