International Journal of Physical Education and Sports Sciences

Vol. IV, Issue No. I, October-2012, ISSN 2231-3745

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AN INTERNATIONALLY INDEXED PEER REVIEWED & REFEREED JOURNAL

www.ignited.in

International Journal of Physical Education and Sports Sciences
Vol. IV, Issue No. I, October-2012, ISSN 2231-3745

"Importance of Exercises for Fitness of Human Heart Health"

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Abstract – Regular exercise benefits your body and mind in many ways. It can help you lose weight, tone your muscles and feel good. But perhaps the most important benefit of exercise is its effects on your heart. It can be trained and grow stronger through exercise, like other muscles in your body. Exercise can also improve heart function and help ward off a number of diseases and conditions. The intensity, frequency and duration of aerobic exercises determine their efficacy and impact on your heart health. Experts disagree on exactly how much exercise you need to maintain your heart health but universally suggest getting it regularly. The Department of Health and Human Services, for example, recommends you engage in at least 150 minutes of moderate aerobic activity per week. If you are pressed for time, you can do 75 minutes of vigorous exercise per week. It's best to spread your exercise sessions throughout the week so your heart is trained on a consistent basis. The agency also suggests that at least two strength-training sessions be incorporated into your weekly routine in addition to aerobic activity. The main findings of the study are there is significant difference between the human heart fitness level of exerciser and non-exerciser and significant relationship between Exercises and Human Heart Health of exerciser.

Keywords: Exercise, Muscles, Stronger, Health, Heart, Fitness, Activity Etc.

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INTRODUCTION

The term cardiac means "related to the heart" and comes from the Greek, kardia, for heart. The vertebrate heart is principally composed of cardiac muscle and connective tissue. Cardiac muscle is an involuntary striated muscle tissue found only in this organ and responsible for the ability of the heart to pump blood. Inactivity is one of the major risk factors for heart disease. However, exercise helps improve heart health, and can even reverse some heart disease risk factors. Like all muscles, the heart becomes stronger as a result of exercise, so it can pump more blood through the body with every beat and continue working at maximum level, if needed, with less strain. The resting heart rate of those who exercise is also slower, because less effort is needed to pump blood. A person who exercises often and vigorously has the lowest risk for heart disease, but any amount of exercise is beneficial. Studies consistently find that light-to-moderate exercise is even beneficial in people with existing heart disease. Exercise has a number of effects that benefit the heart and circulation (blood flow throughout the body). These benefits include improving cholesterol and fat levels, reducing inflammation in the arteries, helping weight loss programs, and helping to keep blood vessels flexible and open. Studies continue to show that physical activity and avoiding high-fat foods are the two most successful means of reaching and maintaining heart-healthy levels of fitness and weight.

EXERCISES TO IMPROVE HEART HEALTH:

Aerobic or cardiovascular exercise is any form of activity that increases your respiratory and heart rate, essentially challenging your heart to work harder and become stronger. Cardiovascular fitness will improve the way your body uses oxygen. As your heart becomes stronger, you will find that you aren't winded walking up the stairs, you can perform physical activity longer, and your resting heart rate will be lower, meaning your heart is more efficient at pumping blood through your body. Though any aerobic exercise is good for your heart, these five physical activities are top-notch for heart health. The human body was born to walk. Whether you rack up the miles on a treadmill or hit the road, brisk walking is a natural way to improve your fitness. Though more challenging than walking, running is another heart-healthy physical activity that the human body is ready-made to do In addition, it is one of the best ways to burn calories (a 150-pound person can burn 100 calories per mile), a bonus if you are also trying to lose weight to reduce your risk of heart disease. The pool may be a great place to float lazily along, but that water can also be a full body fitness challenge. Swimming laps or even participating in water fitness classes will not only raise your heart rate and improve your heart health, the water provides multi-directional resistance that will improve your muscular strength and tone. Swimming is a safe alternative if you have joint problems that walking or running can aggravate. Another cardiovascular

activity that is easy on the joints, cycling is a low-impact exercise that you can do solo in the gym, in a spin class, or outside on the road or trails. While your heart is pumping you'll also be building strength and toning your lower body as well as your core muscles, if you take your bike off-road and Yoga is a form of exercise with roots in ancient India. Traditional forms focus on physical, mental and spiritual aspects; however, modern day yoga focuses more on holding and moving through different physical postures. Similar to Tai chi, yoga appears to be a "slow" form of exercise. However, newer studies show people can obtain significant cardiovascular benefits.

STATEMENT OF THE PROBLEM:-

The problem of present study is stated as "Importance of Exercises for Fitness of Human Heart Health"

OBJECTIVES OF THE STUDY:-

The objectives formulated for this study are:

- To compare the human heart fitness level of exerciser and non-exerciser
- To study the relationship between Exercises and Human Heart Health of exerciser.

HYPOTHESIS OF THE STUDY:-

The following null hypothesis has been formulated in the context of present study's objective:

- There is no significant difference between the human heart fitness level of exerciser and non-exerciser
- There is no significant relationship between Exercises and Human Heart Health of exerciser.

METHODOLOGY: -

In the light of objectives and to test hypothesis of the present study, the researcher adopted survey method for data collection.

DELIMITATIONS OF THE STUDY:-

- This study focused only on the Fitness of Human Heart Health of exerciser and non-exerciser
- This study focused only on the Bhopal city.

SAMPLE DESIGN:-

- Sample size: 80
- Sample frame: College level student in Bhopal city.

RESEARCH TOOLS:-

For the purpose of data collection the following tool was used.

- **Exercises :** Self Made Questionnaire
- **Human Heart Health:** Self Made Questionnaire

STATISTICAL TOOLS:-

After collection of data Mean, standard deviation, 't' value & correlation was applied for statistical analysis.

ANALYSIS AND INTERPRETATION:-

Hypothesis: - 1 there is no significant difference between the human heart fitness level of exerciser and non-exerciser.

Table: - 1 significant difference between the human heart fitness level of exerciser and non-exerciser.

Variables	N	Means	S.D	't'
Exerciser	40	53.8	15.7	3.15
Non Exerciser	40	43.2	9.5	

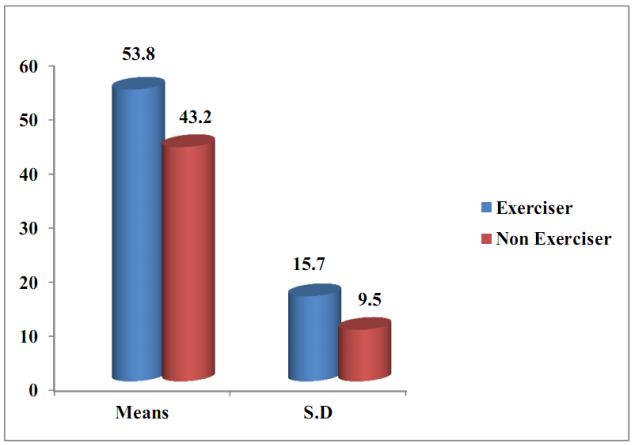
Table value at.05 **Level of Significance =**1.96

Table value at.01 **Level of Significance** =2.58

-------* Significant

In this table 1, the mean score of exerciser is 53.8 and that of non-exerciser is 43.2. The obtained calculated difference between the means of exerciser and non-exerciser 10.6, it reveals that in case of human heart fitness level of exerciser better results than the non-exerciser. The standard deviation of exerciser is 15.7 and that of non-exerciser is 9.5. Obtained' value is calculated to be 3.15 for the df 58 and table value at 0.05 level is 1.96 and at 0.01 level is 2.58 which is less than obtained value. Hence, the null hypothesis is rejected at both the levels and it also leads us to the conclusion that there is significant difference between the human heart fitness level of exerciser and non-exerciser.

Graph:-1 Showing comparison of between the human heart fitness level of exerciser and non-exerciser.

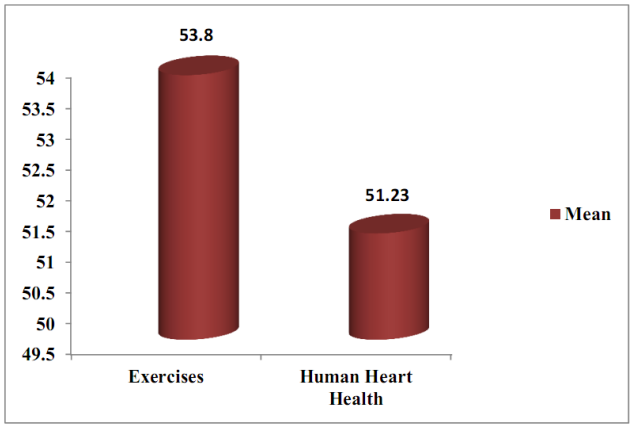


Hypothesis: - 2 there is no significant relationship between Exercises and Human Heart Health of exerciser.

Table: - 2 Significant relationship between Exercises and Human Heart Health of exerciser.

Variable	Strength N	Mean	'r'	Result
Exercises	40	53.8	.8465	Significant
Human Heart Health		51.23		

It is observed from the table 2 that the value of co-efficient of correlation 'r' between Exercises and Human Heart Health is .8465 which is positive in nature. It indicates a positive correlation. Hence the null hypothesis of no significant correlation is rejected, it can be interpreted safely that the Exercises and Human Heart Health of exerciser are correlated to each other. According the interpretation chart there is a marked relationship between Exercises and Human Heart Health of exerciser.



FINDINGS OF THE STUDY:-

The following major findings are reported.

- There is significant difference between the human heart fitness level of exerciser and non-exerciser
- There is significant relationship between Exercises and Human Heart Health of exerciser.

CONCLUSION:

Physical exercise is any bodily activity that enhances or maintains physical fitness and overall health and wellness. It is performed for various reasons including strengthening muscles and the cardiovascular system, honing athletic skills, weight loss or maintenance, as well as for the purpose of enjoyment. Frequent and regular physical exercise boosts the immune system, and helps prevent the "diseases of affluence" such as heart disease, cardiovascular disease, Type 2 diabetes and obesity. It also improves mental health, helps prevent depression, helps to promote or maintain positive self-esteem, and can even augment an individual's sex appeal or body image, which is also found to be linked with higher levels of self-esteem. Childhood obesity is a growing global concern and physical exercise may help decrease some of the effects of childhood and adult obesity. Health care providers often call exercise the "miracle" or "wonder" drug alluding to the wide variety of proven benefits that it provides.

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