



## ORIGINAL RESEARCH PAPER

## Physical Education

### IMPORTANCE AND BENEFITES OF PHYSICAL EXERCISES IN TODAY SCENERIO

**KEY WORDS:** sports, need, exercise, benefits, physical activity, importance.

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#### ABSTRACT

Physical activity is an important determinant of health. Its fundamental role in energy balance and weight control and in decreasing the risks of coronary heart disease, stroke, hypertension, diabetes, colon cancer, breast cancer, and depression is widely known. But in this fast-paced life, people hardly incorporate physical activity in their daily routine. Non communicable diseases have, as a result been on the rise across the world. Regular Physical activity and exercise can help you stay healthy, energetic and independent as you get older. Exercise play avital role in preventing health diseases and stroke. The health benefits of doing regular Exercise have been shown in many studies. Physical activity and exercise can reduce stress and anxiety, boost happy chemicals, improve self-confidence, increase the brain power, sharpen the memory and increase our muscles and bones strength. It also helps in preventing and reducing heart disease, obesity, blood sugar fluctuations, cardiovascular diseases and Cancer.

#### INTRODUCTION

Regular physical exercise is beneficial to the body on a long-term basis. Most experts believe that healthy eating enhances the health of the body. However, recent research indicates that healthy eating has to be in tandem with physical exercises in order to ensure that the body systems function best. Regular physical exercises ensure that the body is able to manage heart diseases and other ailments such as diabetes. By engaging in physical exercises, an individual is able to enhance his or her chances of living longer, while keeping diseases at bay. Additionally, physical exercises ensure that blood lipid patterns are kept at a minimum (Langlois, 2013). Although heart diseases are usually associated with lack of physical exercises, staying active also ensures that the body effectively manages all kinds of diseases. For instance, people can be protected against high blood pressure and breast cancer if they take physical exercises as routine.

Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. The term "Physical activity" is not equal to "exercise". Exercise is a subcategory of physical activity which is structured, repetitive, and purposeful. "A sound body has a sound mind" It means that if a person is weak, dull, and sick, he is not able to do his work efficiently and quickly. It is very important to have a fresh mind before any work, like office work, study or some creative work. Exercise does not mean to go to gym or some club for daily activity; it only means to do some physical activity no matter how and where. Exercise is useful in preventing or treating coronary heart disease, osteoporosis, weakness, diabetes, obesity, and depression. Strengthening exercises provide appropriate resistance to the muscles to increase endurance and strength. Cardiac rehabilitation exercises are developed and individualized to improve the cardiovascular system for prevention and rehabilitation of cardiac disorders and diseases.

A well-balanced exercise program can improve general health, build endurance, and slow many of the effects of aging. The benefits of exercise not only improve physical health, but also enhance emotional well-being. Regular physical activity remains an essential behavior for endorsing health, postponing or preventing predominant musculoskeletal disorders such as mechanical low back pain, neck and shoulder pain and decreasing the risk of increasing coronary heart disease, hypertension, diabetes, osteoporosis, obesity and colon cancers. The period of adolescence represents the transition from childhood to adulthood and lifetime habits such as regular exercise are normally begun at this time. Daily exercise helps in strengthening of heart muscles and it helps maintain desired cholesterol levels. Daily physical activity reduces one's chances of stroke and the risk of heart disease.

Regular exercise lowers blood pressure and improves blood circulation. Exercise helps in reduction of excess body weight leading to lower blood pressure. If supplemented with proper nutrition, exercise is the way to prevent obesity.

The efficiency of our muscles reduces if we are not doing regular physical workout. So, we must do physical fitness exercises every day. Exercise is linked with many physical and physiological benefits that help an individual to function effectively and feel good. Exercise provides an entertaining way to spend enjoyable time. People of all age who are usually inactive can improve their health and well-being by becoming active at a level of moderate intensity in daily basis. Regular Exercise significantly reduces the high blood pressure, risk of developing heart disease, stroke, some cancers, diabetes, and may help to remove the stress, anxiety, and depression. At any age, being physically fit is an advantage to your overall health.

#### EXERCISE

Exercise is a subcategory of physical activity that is planned, structured, and repetitive for the purpose of conditioning any part of the body. Exercise is used to improve health, maintain fitness and is important as a means of physical rehabilitation. Also, we can define exercise as any bodily movement performed in order to develop or maintain physical fitness and overall health.

#### Types of exercise

Exercise and physical activity fall into four basic categories—endurance, strength, balance, and flexibility. Most people have a habit of to focus on one activity or type of exercise and think they're doing enough for their health. Each type of exercise is different, however, doing them all will give you extra benefits. Mixing it up also helps to reduce boredom and stop the possibility of injury.

**Light exercise:** Does not induce sweating unless it's a hot, humid day. There is no obvious change in breathing patterns, sleeping, writing, desk work, typing, very slow walking, are examples for the first category.

**Moderate exercise:** It should raise your heart rate, make you breathe faster and make you feel warm enough to start to sweat after performing the activity for about 10 minutes. Breathing becomes deeper and more frequent. You can carry on a conversation but not sing, bicycling, very light effort, calisthenics, home exercise, light or moderate effort are examples for the second one.

**Vigorous exercise:** will make you breathe hard, increase your heart rate significantly and make you hot enough to

sweat profusely after 3-5 minutes. Breathing is deep and rapid. You can only talk in short phrases, the examples for this type include running, jogging, jogging in place, heavy vigorous effort, rope jumping.

**Endurance:** Endurance, or aerobic, activities increase your breathing and heart rate. They keep your heart, lungs, and circulatory system healthy and improve your overall fitness. Building your endurance makes it easier to carry out many of your everyday activities. Walking or jogging, mowing, raking, digging and Dancing are kinds of this type.

**Strength:** Strength exercises make your muscles stronger. Even small increases in strength can make a big difference in your ability. We can find this type of exercise in Lifting weights, using a resistance band with your own body weight.

**Balance:** Balance exercises help prevent falls, a public problem in older adults. Many lower-body strength exercises also will improve your balance. This type can be noticeable in Standing on one foot, Heel-to-toe walk and Tai Chi.

**Flexibility:** Flexibility exercises stretch your muscles and can help your body stay limber. Being flexible gives you more freedom of movement for other exercises as well as for your everyday activities. Some examples for that in Shoulder and upper arm stretch, Calf stretch and Yoga.

### NEED OF EXERCISE

Everybody knows that the need of exercise in our daily lives, but we may not know why or what exercise can do for us. A good health is obligatory for doing a good work. Exercise means, the daily practice of doing some physical work. Exercise is the key to good health and fresh mind. The daily practice of some physical work does not mean to take stress on body, but it is actually the stress relieving activity. A famous quote is there is awesome evidence that people who lead active lifestyles are less likely to suffer from illness and more likely to live longer. Exercise not only makes you physically fitter but it also improves your mental health and general sense of well-being. Getting fit is not just about running on a treadmill for hours in your local gym, it can be a dance class or a new hobby like fencing or mountain biking.

### IMPORTANCE OF EXERCISE

Exercise means, the daily practice of doing some physical work. Exercise is the key to good health and fresh mind. The daily practice of some physical work does not mean to take stress on body, but it is actually the stress relieving activity. A good health is obligatory for doing a good work. A famous quote is "A sound body has a sound mind" It means that if a person is weak, dull, and sick, he is not able to do his work efficiently and quickly. It is very important to have a fresh mind before any work, like office work, study or some creative work. The people who make exercise as essential part of their routine are happier and more efficient than others. Exercise does not mean to go to gym or some club for daily activity; it only means to do some physical activity no matter how and where.

Many people chose jogging in the morning which is a excellent way of refreshing mind. Some people use to take sits and stands and make their body active. Another good way of exercise at home is jumping rope, which is equally beneficial for both males and females. If you don't want to do any of these exercises then still you can do exercise. Just stand in fresh air in the morning and take deep breaths, this will greatly impact your mind.

It is observed that the part of the body which remains inactive for a period of time, it becomes inactive permanently. Our brain works well when it receives continuous and good blood supply, and when we do exercise blood circulation becomes

fast and blood is supplied to the brain more efficiently. So when a person keep working all the time by sitting on a chair, his efficiency of work will gradually slow down. If you want to improve your work and want to make your position high in society then make sure that you do some exercise daily, because it is necessary for you, and your health.

### BENEFITS OF EXERCISE

Regular exercise makes the heart stronger and the lungs fitter, enabling the cardiovascular system to deliver more oxygen to the body with every heartbeat and the pulmonary system to increase the maximum amount of oxygen that the lungs can take in. Exercise lowers blood pressure, slightly decreases the levels of total and low-density lipoprotein (LDL) cholesterol (the bad cholesterol), and increases the level of high-density lipoprotein (HDL) cholesterol (the good cholesterol). These helpful effects decrease the risk of heart attack, stroke, and coronary artery disease. Exercise makes muscles stronger, allowing people to do tasks that they otherwise might not be able to do or to do them more easily. Every physical task requires muscle strength and some degree of range of motion in joints. Regular exercise can improve both of these qualities. Weight-bearing exercise, such as brisk walking and weight training, strengthens bones and helps prevent osteoporosis. Other health benefits include the following:

**Reduce stress and anxiety:** Stress relief is one of the most common mental benefits of exercise. Regular Exercise can help to manage physical and mental stress. Exercise also increases concentrations of norepinephrine, a chemical that can moderate the brain's response to stress. Being active greatly causes a reduction in stress levels. Good quality sleep helps improve overall wellness and can reduce stress. Regarding anxiety, the warm and chemicals that are released during and after any physical exercise can help people with anxiety disorders calm down. Jumping on the track or treadmill for some moderate-to-high intensity aerobic exercise can reduce anxiety sensitivity.

**Boost happy chemicals:** Exercise releases endorphins, which create feelings of happiness and euphoria. Studies have shown that exercise can even improve symptoms among the clinically depressed. For this reason, doctors recommend that people suffering from depression or anxiety. Higher energy levels resulting from exercise help a person in remaining fresh and happy.

**Improve self-Confidence and self-Image:** Physical fitness can boost self-esteem and improve positive self-image. Regardless of weight, size, gender, or age, exercise can quickly elevate a person's perception of his or her attractiveness, that is, self-worth. It has been proved that in less time of aerobic exercise and resistance training method definitely will help to improve self-image. One of the latest researches was in consistency with most of the previous studies which found significant relationship between physical activity and self-esteem by using different study designs and self-esteem scales. Even if you will take your workout outside and start Exercising in the great outdoors can also increase self-esteem even more.

**Increase brainpower:** Various studies on mice and men have shown that cardiovascular exercise can create new brain cells (aka neurogenesis) and improve overall brain performance. Studies suggest that a vigorous workout increases levels of a brain-derived protein (known as BDNF) in the body, believed to help with decision making, higher thinking, and learning.

**Improves muscles and bones strength:** Exercise involves a series of sustained muscle contractions, of either long or short duration, depending on the nature of the physical activity. Muscle-strengthening activities can help you increase or maintain your muscle mass and strength. Strong muscles and

ligaments reduce your risk of joint and lower back pain by keeping joints in proper alignment. Research shows that doing aerobics bone-strengthening physical activity of at least a moderately-intense level can slow the loss of bone density that comes with age, along with that hip fracture is a serious health condition that can have life-changing negative effects, especially if you're an older adult.

**Reduce the Risk of Heart Diseases:** The heart is a muscle and needs exercise to stay in shape. When it's exercised, the heart can pump more blood through the body and continue working at optimal efficiency with little strain. This will likely help it to stay healthy longer. Regular exercise also helps to keep arteries and other blood vessels flexible, ensuring good blood flow and normal blood pressure. Daily exercise helps in strengthening of heart muscles. It helps maintain desired cholesterol levels. Daily physical activity reduces one's chances of stroke and the risk of heart disease.

**Preventing Obesity:** Obesity and overweight are associated with increased risk for hypertension, osteoarthritis, abnormal cholesterol and triglyceride levels, coronary heart disease, respiratory problems and some cancers. Obesity is a significant health problem all over the world for all ages. Genetics can play a role in the possibility that a person will become obese, the condition occurs when the number of calories consumed exceeds the number of calories expended over a long period of time. The more you exercise, the easier it is to keep your weight under control. Excess calories are stored as fat in the body, and with long-term caloric excess, an individual eventually becomes obese. Regular exercise (and proper nutrition) can help reduce body fat.

**Exercise and Diabetes:** Diabetes and exercise go hand in hand, at least when it comes to managing your diabetes. Exercise can help you improve your blood sugar control, boost your overall fitness, and reduce your risk of heart disease and stroke. But diabetes and exercise pose unique challenges, too. To exercise safely, it's crucial to track your blood sugar before, during and after physical activity. You'll learn how your body responds to exercise, which can help you prevent potentially dangerous blood sugar fluctuations. The affect physical activity has on your blood glucose will vary depending on how long you are active and many other factors.

## CONCLUSION

Exercise not only makes you physically fitter but it also improves your all body health and general sense of well-being. Physical activity or exercise can reduce the risk of developing several diseases like type 2 diabetes, cancer and cardiovascular disease. Regular physical exercise is beneficial to the body on a long-term basis. Most experts believe that healthy eating enhances the health of the body. However, recent research indicates that healthy eating has to be in tandem with physical exercises in order to ensure that the body systems function best. Regular physical exercises ensure that the body is able to manage heart diseases and other ailments such as diabetes. By engaging in physical exercises, an individual is able to enhance his or her chances of living longer, while keeping diseases at bay. Daily exercise can reduce stress and anxiety, boost happy chemicals, improve self-confidence, increase the brain power, sharpen the memory and increase our muscles and bones strength. Physical activity and exercise can have immediate and long-term health benefits. Most importantly, regular activity can improve your quality of life. A minimum of 30 minutes a day can allow you to enjoy these benefits.

## REFERENCES

1. Jones DA, Ainsworth BE, Croft JB. Moderate leisure-time activity: who is meeting the public health recommendations? A national cross-sectional study. *Archives of Family Medicine*. 1998; 285-289.
2. Vuori I. Exercise and physical health: Musculoskeletal health and functional

- capabilities. *Research Quarterly for Exercise and Sport*. 1995; 66:276-285.
3. Andersen LB, Haraldsdottir J. Tracking of cardiovascular disease risk factors including maximal oxygen uptake and physical activity from late teenage to adulthood: an 8 year follow-up study. *Journal of Internal Medicine*. 1993; 234:309-315.
4. National Institutes of Health, National Heart, Lung, and Blood Institute. *Your Guide to Physical Activity and Your Heart* (PDF). U.S. Department of Health and Human Services. 2006.
5. Wilmore J, Knuttgen H. *Aerobic Exercise and Endurance Improving Fitness for Health Benefits*. The Physician and Sportsmedicine 2003; 31(5):45. doi:10.3810/psm.2003.05.367.
6. Hiilloskorpi HK, Pasanen ME, Fogelholm MG, Laukkanen RM, Manttari AT. Use of heart rate to predict energy expenditure from low to high activity levels. *Int J Sports Med*. 2003; 24(5):332-6.
7. Elmaghoub SS, Calders P, Lambers S, Stegen SM, Van Laethem C, Cambier DC. The effect of combined exercise training in adolescents who are overweight or obese with intellectual disability: The role of training frequency. *Journal of Strength and Conditioning Research*. 2011; 25(8):1.
8. Exercise. Medical-dictionary. The freedictionary.com. In turn citing: Gale Encyclopedia of Medicine. Copyright 2008. Citation: Strengthening exercise increases muscle strength and mass, bone strength, and the body's metabolism. It can help attain and maintain proper weight and improve body image and self-esteem
9. Buckley JP, Hedge A, Yates T, Copeland RJ, Loosemore M, Hamer M et al. The sedentary office: a growing case for change towards better health and productivity. Expert statement commissioned by Public Health England and the Active Working Community Interest Company. *British Journal of Sports Medicine*. 2015.
10. Andrea L Dunn, Madhukar H Trivedi, James B Kampert, Camillia G Clark, Heather O. Chambliss Exercise treatment for depression: Efficacy and dose response *American Journal of Preventive Medicine*. 2005; 28(1):1-8.
11. Griffin EW, Mullally S, Foley C, Warmington SA, O'Mara SM, Kelly AM. Aerobic exercise improves hippocampal function and increases BDNF in the serum of young adult males. *Department of Physiology, School of Medicine, University of Dublin, Trinity College, Dublin, Ireland. Physiology & Behavior*. 2011; 24,104(5):934-41.
12. Esfahani N. The impact of sport on physical, anxiety, sleep disorder, social function and depression components of mental health in Azzahra University students. *Harakat*, 2002; (12):75-86.
13. Elmagd M, Abubakr M, Manal Sami, Elmarsafawy TS, Aljadaan O. The Impact of Physical Activity Participation on the Self-Esteem of the Students. A Cross Sectional Study from RAKMHSU – RAK – UAE. *International Journal of Physical Education, Sports and Health*. 2015; 2(1):87-91.
14. Griffin EW, Mullally S, Foley C, Warmington SA, O'Mara SM, Kelly AM. Aerobic exercise improves hippocampal function and increases BDNF in the serum of young adult males. *Department of Physiology, School of Medicine, University of Dublin, Trinity College, Dublin, Ireland. Physiology & Behavior*. 2011; 24,104(5):934-41.
15. Erickson KI, Voss MW, Prakash RS, Basak C, Szabo A, Chaddock L et al. Exercise training increases size of hippocampus and improves memory. *Department of Psychology, University of Pittsburgh, Pittsburgh, PA, USA. Proceedings of the National Academy of Sciences*. 2011; 108(7):3017-22.
16. Burroughs Paul, Laurence E, Dahners. The effect of enforced exercise on the healing of ligament injuries. *The American journal of sports medicine*. 1990; 18(4):376-378.
17. Fletcher Gerald F et al. Statement on exercise: Benefits and recommendations for physical activity programs for all Americans a statement for health professionals by the committee on exercise and cardiac rehabilitation of the council on clinical cardiology, American heart association. *Circulation* 1996; 94(4):857-862.
18. Ajmer Singh Dr. *Essentials of Physical Education*, Kalyani Publishers, New Delhi, 2007, 348-353.
19. Burleson Jr MA et al. Effect of weight training exercise and treadmill exercise on post-exercise oxygen consumption. *Medicine and science in sports and exercise* 1998; 30(4):518-522.
20. McTiernan A. editor. *Cancer Prevention and Management Through Exercise and Weight Control*. Boca Raton: Taylor & Francis Group, LLC, 2006.
21. Giovannucci EL, Liu Y, Leitzmann MF, Stampfer MJ, Willett WC. A prospective study of physical activity and incident and fatal prostate cancer. *Arc*.