

# Physical Activity is Key to Health

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**ABSTRACT:** Get in moving is a challenge because today physical activity is less a part of our daily lives. There are a few jobs that require physical exertion. We have become a mechanically mobile society, relying on machines rather than muscles to get around. In addition, we have become a nation of observers with more people spending their leisure time pursuing just that-leisure consequently, statistics shows that obesity and over-weight, the problem that comes with high blood pressure, diabetes, cardiac arrest etc. are on the rise. But statistics also shows that preventive medicine play off, so one should not wait until her/his doctor gives an ultimatum. Hence everyone must take the initiative step to get active. Health play a great role in our life and the physical activity is a way to live a better healthy life. So the present study has been designed to investigate importance of physical activity on our health.

**KEYWORDS:** Health, Exercise, Physical Activity.

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## INTRODUCTION

Health is the level of functional or metabolic efficiency of a living organism. In humans, it is the general condition of a person's mind and body, usually meaning to be free from illness, injury or pain. The World Health Organization defined health in its broader sense in 1946 as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." Although this definition has been subject to controversy, in particular as lacking operational value and because of the problem created by use of the word "complete," it remains the most enduring. Other definitions have been proposed, among which a recent definition that correlates health and personal satisfaction. Classification systems such as the WHO Family of International Classifications, including the International Classification of Functioning, Disability and Health and the International Classification of Diseases (ICD), are commonly used to define and measure the components of health. Systematic activities to prevent or cure health problems and promote good health in humans are undertaken by health care providers. Applications with regard to animal health are covered by the veterinary sciences. The term "healthy" is also widely used in the context of many types of non-living organizations and their impacts for the benefit of humans, such as in the sense of healthy communities, healthy cities or healthy environments. In addition to health care interventions and a person's surroundings, a number of other factors are known to influence the health status of individuals, including their background, lifestyle, and economic, social conditions, and spirituality; these are referred to as "determinants of health." Studies have shown that high levels of stress can affect your health.

Generally, the context in which an individual lives is of great importance for both his health status and quality of their life. It is increasingly recognized that health is maintained and improved not only through the advancement and application of health science, but also through the efforts and intelligent lifestyle choices of the individual and society. According to the World Health Organization, the main determinants of health include the social and economic environment, the physical environment, and the person's individual characteristics and behaviors. An increasing number of studies and reports from different organizations and contexts examine the linkages between health and different factors, including lifestyles, environments, health care organization, and health policy – such as the 1974 Lalonde report from Canada; the Alameda County Study in California; and the series of World Health Reports of the World Health Organization, which focuses on global health issues including access to health care and improving public health outcomes, especially in developing countries. The concept of the "health field," as distinct from medical care, emerged from the Lalonde report from Canada. The report identified three interdependent fields as key determinants of an individual's health. These are: Lifestyle, Environmental, Biomedical.

The maintenance and promotion of health is achieved through different combination of physical, mental, and social well-being, together sometimes referred to as the "health triangle." The WHO's 1986 Ottawa Charter for Health Promotion further stated that health is not just a state, but also "a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities." Focusing more on lifestyle issues and their relationships with functional health, data from the Alameda County Study suggested that people can improve their health via exercise, enough sleep, maintaining a healthy body weight, limiting alcohol use, and avoiding smoking. The ability to adapt and to self manage have been suggested as core components of human health.

The environment is often cited as an important factor influencing the health status of individuals. This includes characteristics of the natural environment, the built environment, and the social environment. Factors such as clean water and air, adequate housing, and safe communities and roads all have been found to contribute to good health, especially to the health of infants and children. Some studies

have shown that a lack of neighborhood recreational spaces including natural environment leads to lower levels of personal satisfaction and higher levels of obesity, linked to lower overall health and well being. This suggests that the positive health benefits of natural space in urban neighborhoods should be taken into account in public policy and land use. Genetics, or inherited traits from parents, also play a role in determining the health status of individuals and populations. This can encompass both the predisposition to certain diseases and health conditions, as well as the habits and behaviors individuals develop through the lifestyle of their families. For example, genetics may play a role in the manner in which people cope with stress, mental, emotional or physical. For example, obesity is a very large problem in the United States [citation needed] that contributes to bad mental health and causes stress in a lot of people's lives. (One difficulty is the issue raised by the debate over the relative strengths of genetics and other factors; interactions between genetics and environment may be of particular importance.) Regular exercise can provide the basis for good health and wellness. In the past health meant only the absence of disease or illness. Today we define health in terms of physical, mental, social and emotional wellness. The health, fitness, and medical experts now regard exercise, practiced on a regular basis, as essential for achieving and maintaining good health. Being physically fit does not guarantee you health. However, exercise is essential component of good health. Exercise is the basis for living a full life. It will help you bring your body, mind, and spirit into concert. The effort it takes for you to be physically fit will help you to discover the individual within yourself. Being physically fit means living at your fullest physical potential. Physical fitness is the capability of the heart, blood vessels, lungs, and muscles to function at optimal efficiency. It provides a basis for living a full and rewarding life-style. Sedentary adult are more often affected by risk factors of the metabolic syndrome (obesity, lipid metabolism disturbance, hypertension, prediabetes). They suffer more often from complaints and diseases of the muscle-skeleton-system (e.g. back pain, osteoporosis). They have more often problems in the psychic and somatic area (e.g. depressive mood). They have more often a low self-esteem, a low state of well-being and are less satisfied

**Health Enhancing Physical Activity** – Health Enhancing Physical Activity is any form of physical activity that benefits health and functional capacity without health and functional without undue harm or risk. Physical activity does not need to be strenuous to be effective. Thirty minutes a day of moderate intensity activity is enough to benefit health. The choice of activity is simple and includes: Brisk walking, cycling, swimming, dancing, aerobics, jogging, moving the lawn and field ground. Accumulate at least two hours per week (or 30 minutes on most of the days) of everyday life physical activity (e.g. brisk walking, stair-climbing, cycling) or of sport activity (e.g. playing golf, tennis or volleyball) requiring at least moderate physical intensity. Accumulate additionally at least 90 minutes of “structured physical activity” per week – that means sport exercise stimulating effective the fitness factors endurance, strength, flexibility, coordination, relaxation.

#### **MENTAL HEALTH**

The World Health Organization describes mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". Mental Health is not just the absence of mental illness.

Mental illness is described as 'the spectrum of cognitive, emotional, and behavioral conditions that interfere with social and emotional well-being and the lives and productivity of people. Having a mental illness can seriously impair, temporarily or permanently, the mental functioning of a person. Other terms include: 'mental health problem', 'illness', 'disorder', 'dysfunction'. (Hungerford et al. 2012). Roughly a quarter of all adults 18 and over in the US suffer from a diagnosable mental illness. Mental illnesses are the leading cause of disability in the US and Canada. Examples include, schizophrenia, ADHD, major depressive disorder, bipolar disorder, anxiety disorder, post-traumatic stress disorder and autism.

Many teens suffer from mental health issues in response to the pressures of society and social problems they encounter. Some of the key mental health issues seen in teens are: depression, eating disorders, and drug abuse. There are many ways to prevent these health issues from occurring such as communicating well with your child or a teen suffering from mental health issues. Also, remember that mental health can be treated and be attentive to your child's behavior.

#### **MAINTAINING HEALTH**

Achieving and maintaining health is an ongoing process, shaped by both the evolution of health care knowledge and practices as well as personal strategies and organized interventions for staying healthy known as Lifestyle Management. The physical activity is playing a great role in maintaining our overall health. The persons who involved in any type of physical activity lives more healthy than the people who have sedentary life style.

#### **ROLE OF PHYSICAL ACTIVITY**

Want to feel better, have more energy and perhaps even live longer? Look no further than exercise. The health benefits of regular exercise and physical activity are hard to ignore. And the benefits of exercise are yours for the taking, regardless of your age, sex or physical ability. Need more convincing to exercise? Check out these seven ways exercise can improve your life. Exercise is the miracle cure we've always had, but for too long we've neglected to take our recommended dose. Our health is now suffering as a consequence. This is no snake oil. Whatever your age, there's strong scientific evidence that being physically active can help you lead a healthier and even happier life.

People who do regular activity have a lower risk of many chronic diseases, such as heart disease, type 2 diabetes, stroke and some cancers.

Research shows that physical activity can also boost self-esteem, mood, sleep quality and energy, as well as reducing your risk of stress, depression, dementia and Alzheimer's disease.  
"If exercise were a pill, it would be one of the most cost-effective drugs ever invented," says Dr Nick Cavill, a health promotion consultant.

### **BENEFITS OF PHYSICAL ACTIVITIES**

Given the overwhelming evidence, it seems obvious that we should all be physically active. It's essential if you want to live a healthy and fulfilling life into old age.

- While the burden of non-communicable diseases is silently growing worldwide, now there is a considerable research available attesting to the health enhancing effects of sports and exercise or more generally physical activity.
- Physical activity enhances quality of life.
- Physical activity reduces the incidence of a number of chronic illnesses, such as heart and vascular disease, heart stroke, high blood pressure, diabetes, obesity, osteoporosis and cancer of the large intestine and lower back pain.
- Regular physical activity is associated with less fear, lower risk of depression and a greater feeling of well-being.
- Regular physical activity is necessary to be able to perform every day activity at work, home and during leisure time without experiencing fatigue.
- Significant groups of the elderly are generally characterized by limited mobility and loss of independence. There is sufficient evidence showing that regular physical activity can prevent or reduce the likelihood of such limitation.
- Regular physical activities make a positive contribution to the care and treatment of people who are physically inactive.
- Promoting physical activity leads to saving in medical cost.

*It's medically proven that people who do regular physical activity have:*

- up to a 35% lower risk of coronary heart disease and stroke
- up to a 50% lower risk of type 2 diabetes
- up to a 50% lower risk of colon cancer
- up to a 20% lower risk of breast cancer
- a 30% lower risk of early death
- up to an 83% lower risk of osteoarthritis
- up to a 68% lower risk of hip fracture
- a 30% lower risk of falls (among older adults)
- up to a 30% lower risk of depression

**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, and merely 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 may also help prevent depression, help to promote or maintain positive self-esteem, improve mental health generally, and even can augment an individual's sex appeal or body image, which has been 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 can provide.

Active living is a way of life that integrates physical activity into your everyday routines, such as walking to the store or biking to work. Active living brings together urban planners, architects, transportation engineers, public health professionals, activists and other professionals to build places that encourage active living and physical activity. One example includes efforts to build sidewalks, crosswalks, pedestrian crossing signals and other ways for children to walk safely to and from school, as seen in the Safe Routes to School program. Recreational opportunities (parks, fitness centres etc.) close to the home or workplace, walking trails and bike lanes for transportation also encourage a more active lifestyle. Active living is a combination of physical activity and recreation activities aimed at the general public to encourage a healthier lifestyle. There are many health related benefits to being physically active and living an active life. Active living can help to reduce the risk of chronic diseases, improve your overall health and well-being, reduce stress levels, minimize health related medical costs, help you to maintain a healthy weight, assist in proper balance and posture and the maintenance of healthy bones and strong muscles. Active living can also improve your sleeping patterns and aid in the prevention of risk factors for heart disease such as blood cholesterol levels, diabetes and hypertension.

#### **EXERCISE CONTROL WEIGHT**

Exercise can help prevent excess weight gain or help maintain weight loss. When you engage in physical activity, you burn calories. The more intense the activity, the more calories you burn. You don't need to set aside large chunks of time for exercise to reap weight-loss benefits. If you can't do an actual workout, get more active throughout the day in simple ways by taking the stairs instead of the elevator or revving up your household chores

#### **EXERCISE COMBAT HEALTH CONDITION AND DISEASE**

Worried about heart disease? Hoping to prevent high blood pressure? No matter what your current weight, being active boosts high-density lipoprotein (HDL), or "good," cholesterol and decreases unhealthy triglycerides. This one-two punch keeps your blood flowing smoothly, which decreases your risk of cardiovascular diseases. In fact, regular physical activity can help you prevent or manage a wide range of health problems and concerns, including stroke, metabolic syndrome, type 2 diabetes, depression, and certain types of cancer, arthritis and falls.

#### **EXERCISE IMPROVES MOOD**

Need an emotional lift? Or need to blow off some steam after a stressful day? A workout at the gym or a brisk 30-minute walk can help. Physical activity stimulates various brain chemicals that may leave you feeling happier and more relaxed. You may also feel better about your appearance and yourself when you exercise regularly, which can boost your confidence and improve your self-esteem.

#### **EXERCISE BOOSTS ENERGY**

Winded by grocery shopping or household chores? Regular physical activity can improve your muscle strength and boost your endurance. Exercise and physical activity deliver oxygen and nutrients to your tissues and help your cardiovascular system work more efficiently. And when your heart and lungs work more efficiently, you have more energy to go about your daily chores.

#### **EXERCISE PROMOTE BETTER SLEEP**

Struggling to fall asleep? Or to stay asleep? Regular physical activity can help you fall asleep faster and deepen your sleep. Just don't exercise too close to bedtime, or you may be too energized to fall asleep.

#### **EXERCISE CAN BE FUN**

Exercise and physical activity can be a fun way to spend some time. It gives you a chance to unwind, enjoy the outdoors or simply engage in activities that make you happy. Physical activity can also help you connect with family or friends in a fun social setting. So, take a dance class, hit the hiking trails or join a soccer team. Find a physical activity you enjoy, and just do it. If you get bored, try something new.

#### **THE BOTTOM LINE ON EXERCISE**

Exercise and physical activity are a great way to feel better, gain health benefits and have fun. As a general goal, aim for at least 30 minutes of physical activity every day. If you want to lose weight or meet specific fitness goals, you may need to exercise more. Remember to check with your doctor before starting a new exercise program, especially if you haven't exercised for a long time, have chronic health problems, such as heart disease, diabetes or arthritis, or you have any concerns.

#### **PHYSIOLOGICAL BENEFIT OF EXERCISE**

His beneficial effect of exercise on the cardiovascular system is well documented. There is a direct relation between physical inactivity and cardiovascular mortality, and physical inactivity is an independent risk factor for the development of coronary artery disease. There is a dose-response relation between the amount of exercise performed from approximately 700 to 2000 kcal of energy expenditure per

week and all-cause mortality and cardiovascular disease mortality in middle-aged and elderly populations. The greatest potential for reduced mortality is in the sedentary who become moderately active. Most beneficial effects of physical activity on cardiovascular disease mortality can be attained through moderate-intensity activity (40% to 60% of maximal oxygen uptake, depending on age). ... persons who modify their behavior after myocardial infarction to include regular exercise have improved rates of survival. ... Persons who remain sedentary have the highest risk for all-cause and cardiovascular disease mortality

### **IMMUNE SYSTEM**

Although there have been hundreds of studies on exercise and the immune system, there is little direct evidence on its connection to illness. Epidemiological evidence suggests that moderate exercise has a beneficial effect on the human immune system; an effect which is modeled in a J curve. Moderate exercise has been associated with a 29% decreased incidence of upper respiratory tract infections (URTI), but studies of marathon runners found that their prolonged high-intensity exercise was associated with an increased risk of infection occurrence. However, another study did not find the effect. Immune cell functions are impaired following acute sessions of prolonged, high-intensity exercise, and some studies have found that athletes are at a higher risk for infections. The immune systems of athletes and non athletes are generally similar. Athletes may have slightly elevated natural killer cell count and cytolytic action, but these are unlikely to be clinically significant. Vitamin C supplementation has been associated with lower incidence of URIs in marathon runners.

Biomarkers of inflammation such as C-reactive protein, which are associated with chronic diseases, are reduced in active individuals relative to sedentary individuals, and the positive effects of exercise may be due to its anti-inflammatory effects. In individuals with heart disease, exercise interventions lower blood levels of fibrinogen and C-reactive protein, an important cardiovascular risk marker. The depression in the immune system following acute bouts of exercise may be one of the mechanisms for this anti-inflammatory effect

### **BRAIN FUNCTIONS**

Physical activity has been shown to be neuro protective in many neurodegenerative and neuromuscular diseases. Evidence suggests that it reduces the risk of developing dementia. The Caerphilly Heart Disease Study followed 2,375 male subjects over 30 years and examined the association between regular physical exercise and dementia. The study found that men who exercised regularly had a 59% reduction in dementia when compared to the men who didn't exercise. In addition, a 2008 review of cognitive enrichment therapies (strategies to slow or reverse cognitive decline) concluded that "physical activity, and aerobic exercise in particular, enhances older adults' cognitive function".

In mice, exercise improves cognitive functioning via improvement of spatial learning, and enhancement of synaptic plasticity and neurogenesis. In a 2009 study, scientists made two groups of mice swim a water maze, and then in a separate trial subjected them to an unpleasant stimulus to see how quickly they would learn to move away from it. Then, over the next four weeks they allowed one group of mice to run inside their rodent wheels, an activity most mice enjoy, while they forced the other group to work harder on mini-treadmills at a speed and duration controlled by the scientists. They then tested both groups again to track their learning skills and memory. Both groups of mice improved their performances in the water maze from the earlier trial. But only the extra-worked treadmill runners were better in the avoidance task, a skill that, according to neuroscientists, demands a more complicated cognitive response. The mice who were forced to run on the treadmills showed evidence of molecular changes in several portions of their brains when viewed under a microscope, while the voluntary wheel-runners had changes in only one area. According to an author of the study, "our results support the notion that different forms of exercise induce neuroplasticity changes in different brain regions."

There are several possibilities for why exercise is beneficial for the brain. Examples are as follows:

- increasing the blood and oxygen flow to the brain;
- Increasing growth factors that help neurogenesis. and promote synaptic plasticity — possibly improving short and long term memory;
- Increasing chemicals in the brain that help cognition, such as dopamine, glutamate, nor epinephrine, and serotonin.

Physical activity is thought to have other beneficial effects related to cognition as it increases levels of nerve growth factors, which support the survival and growth of a number of neuronal cells

### **KEYWORD DEFINITIONS**

**Health:** The World Health Organization (WHO) defined health in its broader sense in 1946 as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

**Exercise:** Physical exercise is any bodily activity that enhances or maintains physical fitness and overall health and wellness.

**Physical Activity:** Physical activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure

## CONCLUSION

Health play a great role in our life and the physical activity is a way to live a better healthy life. So we find that physical activity has very positive effect on our health. We find out that there are many health related benefits to being physically active and living an active life. Active living can help to reduce the risk of chronic diseases, improve your overall health and well-being, reduce stress levels, minimize health related medical costs, help you to maintain a healthy weight, assist in proper balance and posture and the maintenance of healthy bones and strong muscles. Active living can also improve your sleeping patterns and aid in the prevention of risk factors for heart disease such as blood cholesterol levels, diabetes and hypertension. Physical activity has been shown to be neuro protective in many neurodegenerative and neuromuscular diseases.

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