

An Overview on Daily Exercise

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ABSTRACT: *Physical activity is regarded as any physical movement that requires energy expenditure and is generated by skeletal muscles. Physical activity and exercise on a regular basis may help you remain healthy, active, and independent as you age. Exercise is important in avoiding health problems such as heart disease and stroke. Many studies have shown the health advantages of regular exercise. This paper examines the evidence supporting the health benefits of exercise across the board. Physical activity and exercise may help to decrease stress and anxiety, raise happy hormones, promote self-confidence, boost brain capacity, improve memory, and strengthen our muscles and bones. It also aids in the prevention and treatment of heart disease, obesity, blood sugar swings, cardiovascular disease, and cancer. This paper can be used in future work as researcher can further study on the concept of Exercise by calculating real data.*

KEYWORDS: *Disease, Daily Exercise, Energy, Physical Activity, Strength.*

1. INTRODUCTION

Physical activity is regarded as any physical movement that requires energy expenditure and is generated by skeletal muscles. The terms "physical activity" and "exercise" are not synonymous. Exercise is an organized, repeated, and intentional subset of physical exercise. "A healthy body equals a healthy mind." It implies that if an individual is weak, dull, or unwell, he will be unable to do his job effectively and efficiently. It is critical to have a clear mind before beginning any task, whether it be office job, study, or creative activity. People who make fitness a priority in their lives are happier and more productive than others[1]. Exercise does not imply that you must go to the gym or join a club on a daily basis; it just implies that you must engage in some kind of physical exercise, regardless of how or where you do it.

Depression, Obesity, Weakness, Coronary heart disease, Diabetes, as well as Osteoporosis may all be prevented or treated by exercise. Strengthening exercises supply the muscles with the right amount of resistance to help them gain endurance and strength. Heart rehabilitation exercises are created and tailored to the individual's needs in order to enhance the circulatory system and prevent and treat cardiac illnesses and diseases[2]. A well-balanced exercise routine may enhance overall health, increase endurance, and delay the aging process in numerous ways. Exercise improves not just your physical health but also your mental well-being. Regular physical activity is still an important habit for maintaining good health, delaying or preventing common musculoskeletal disorders like mechanical low back pain, neck and shoulder pain, and lowering the risk of coronary heart disease, hypertension, diabetes, osteoporosis, obesity, and colon cancer. Adolescence marks the transition from childhood to adulthood, and it is at this time that many lifelong habits, such as regular exercise, are established[3].

Unfortunately, research has shown that physical activity levels decrease steadily throughout adolescence. You should exercise every day, regardless of your age or form. Exercise not only allows you to wear your favorite dress, but it also develops your muscles, keeps your bones

healthy, and enhances your skin, as well as allowing you to relax, sleep better, and have a stronger immune system. Exercise helps to strengthen the cardiac muscles on a daily basis. It aids in the maintenance of healthy cholesterol levels. Physical exercise on a daily basis lowers the risk of stroke and heart disease[4]. Exercise helps to reduce blood pressure and enhance circulation. Exercise aids in the loss of extra body weight, lowering blood pressure. Calories are burned as a consequence of exercise.

Exercise, when combined with appropriate diet, is the most effective method to avoid obesity. If a healthy individual does not exercise on a regular basis, he may become physically unfit. If we do not engage in regular physical activity, our muscles' efficiency decreases. As a result, we must engage in daily physical activity. Exercise has been linked to a variety of physical and physiological advantages that may help a person perform more efficiently and feel better. Exercise is a fun way to spend time with friends and family[5]. People of all ages who are sedentary may enhance their fitness and well-being by getting more active on a regular basis at a moderate intensity. Regular exercise lowers blood pressure, lowers the risk of heart disease, stroke, certain cancers, and diabetes, and may also help to relieve stress, worry, and sadness. Being physically active is beneficial to your overall fitness at any age.

1.1. Exercise:

It is a kind of physical exercise that is organized, regulated, and repeated with the goal of training a certain body component. Exercise is beneficial for improving health and fitness, as well as for physical rehabilitation. Exercise may also be defined as any bodily activity that is done to improve or enhance physical fitness as well as general health[6].

1.2. Exercise Types:

Balance, Endurance, Flexibility and Strength are the four fundamental characteristics of exercise and physical activity. The majority of individuals have a tendency of focusing on one activity or kind of exercise and believing that this is sufficient for their health. Each kind of exercise is unique, yet practicing all of them will provide you with additional advantages. Boredom is reduced and the risk of harm is reduced by mixing things up.

1.2.1 Balance:

Balance exercises may help avoid falls, which are a common issue among the elderly. Many lower-body strength workouts can also help you gain balance. Standing on one foot, heel-to-toe walking, and Tai Chi are all examples of this kind.

1.2.2 Flexibility:

Exercises allow your body remains limber by stretching your muscles. Being flexible allows you to move more freely during other workouts and in daily activities. Shoulder and upper arm stretches, calf stretches, and yoga are some examples.

1.2.3 Endurance:

Endurance, or aerobic, exercises raise your heart rate and breathing rate. They enhance your overall fitness while keeping your heart, lungs, and circulatory system strong. Increasing your endurance makes it simpler to complete many of your daily tasks. This category includes activities such as walking or running, mowing, raking, mining, and dancing.

1.2.4 Strength:

Muscles get stronger as a result of strength training. Even little gains in strength may have a significant impact on your abilities. Lifting weights and utilizing a resistance band by your own weight are examples of this kind of workout.

1.3. Exercise Importance in Daily Life:

Muscles, blood, bones, and other living tissue make up each of our physical bodies. We get sick whenever any one of these become damaged or stop functioning correctly. Nobody enjoys being sick. As a result, it is essential that we maintain a healthy and fit physique. One method to keep the body healthy is to exercise it. Our muscles grow weakened and that we are lesser able to perform tasks correctly if we do not exercise. Bones may also grow weaker with time, making them more prone to breaking. It's done for a variety of purposes, including promoting growth and development, avoiding ageing, developing muscles as well as the cardiovascular system, improving sports abilities, weight reduction or maintenance, and just having fun[7].

Physical activity strengthens the immune system and helps to avoid "affluent illnesses" including cardiovascular disease, type 2 diabetes, and obesity. It may also help to prevent stress and depression, improve sleep quality and act as a non-pharmaceutical sleep aid to treat diseases like insomnia, promote or maintain positive self-esteem, improve mental health, regulate fertility health, as well as enhance a person's sex appeal or self - image, which has been linked to stress and depression. Obesity in children and adults is a rising worldwide issue, and physical activity may help mitigate some of the negative consequences of obesity in children and adults. Exercise has been dubbed the "wonder" or "miracle" medicine by certain health care professionals, owing to the broad range of advantages it may offer for many people.

1.4. Exercise Benefits:

Regular exercise strengthens the heart and lungs, allowing the cardiac muscle to supply extra oxygen throughout the body with each pulse as well as the pulmonary system to raise the maximal quantity of oxygen the lungs can absorb. Exercise reduces blood pressure, lowers overall and low-density lipoprotein (LDL) cholesterol levels (bad cholesterol), and raises high-density lipoprotein (HDL) cholesterol levels (good cholesterol) (the good cholesterol). Heart attacks, strokes, and coronary artery disease are all reduced as a result of these beneficial benefits. Furthermore, individuals who exercise frequently are less likely to get colon cancer and some types of diabetes. Exercise strengthens muscles; enabling individuals to do activities they would not be able to accomplish otherwise or to execute them more easily. Muscle strength and joint range of motion are required for any physical job. Both of these characteristics may be improved with regular exercise. Exercise stretches muscles and joints, increasing flexibility and reducing the risk of injury. Exercise may also assist to improve balance by strengthening the tissues surrounding joints and throughout the body, reducing the risk of falling. Weight-bearing activity like brisk walking and weight training helps to build bones and prevent osteoporosis. The following are some additional health advantages:

1.4.1. Boost happy chemicals:

Exercise produces endorphins, which are happy and euphoric chemicals. Exercise has been proven in studies to improve symptoms in clinically depressed people. As a result, physicians advise that

individuals who are depressed or anxious do so. Exercise may be equally as helpful as antidepressant drugs in treating depression in certain instances. Exercise-induced increased energy levels aid in a person's ability to stay fresh and cheerful. Following a good fitness regimen may make the day more enjoyable and bright. Working exercise for thirty min a few days a week may dramatically improve your attitude.

1.4.2. Increase brainpower:

Cardiovascular exercise has been proven in tests on mice and men to generate new brain cells (known as neurogenesis) and enhance overall brain function. A rigorous exercise, according to studies, boosts levels of a brain-derived protein (BDNF) in the body, which is thought to aid decision-making, higher thinking, and learning.

1.4.3. Enhance muscles and bones strength:

Depending on the circumstances of the physical activity, exercise entails a sequence of continuous muscular contractions of either long or short duration. Muscular-strengthening exercises may aid in the growth or maintenance of muscle size and strength. By maintaining joints in correct alignment, strong muscles and ligaments decrease the likelihood of joint and lower back discomfort. Additionally, exercise improves the respiratory and circulatory systems, allowing for improved oxygen and glucose supply to the muscle. Hip fracture is a serious health condition that can have life-changing negative effects, especially if you're an older adult, according to research. Conducting aerobics bone-strengthening physical activity of at least a moderately-intense level can slow the loss of bone density that comes with age, as well as that hip fracture is a serious health condition that can have life-changing negative effects, especially if you're an older adult. People who engage in 120 to 300 minutes of at least moderate-intensity aerobic exercise per week, however, had a reduced risk of hip fracture, according to studies.

1.4.4. Removing Obesity:

Hypertension, osteoarthritis, abnormal cholesterol and triglyceride levels, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, sleep apnea, respiratory issues, and certain malignancies are all linked to obesity and overweight. Obesity is a serious health issue that affects people of all ages all over the globe. Obesity occurs when the number of calories eaten exceeds the amount of calories burned over a lengthy period of time, and genetics may play a part in the likelihood of a person becoming fat. The more you exercise, the simpler it is to maintain a healthy weight. Excess calories are stored as fat in the body, and a person who consumes too many calories over time can become obese. Exercising may help you avoid gaining weight or keep it off after you've lost it. You burn calories when you participate in physical exercise. The higher the intensity of your exercise, the more calories you will burn. Regular exercise (together with good diet) may help you lose weight. Weight reduction will be most successful if we follow a cardiovascular exercise program consisting of moderate-intensity activity for 5-7 days a week. Obesity may be fought by following a healthy diet.

1.4.5. Reduce the Risk of Heart Diseases:

The heart is a muscle that requires regular exercise to remain in good condition. When the heart is trained, it can pump more blood through the body and continue to function at peak efficiency with little effort. This will most likely assist it in being healthy for a longer period of time. Regular

exercise also helps to maintain the flexibility of arteries and other blood vessels, maintaining proper blood flow and blood pressure. Exercise helps to strengthen the cardiac muscles on a daily basis. It aids in the maintenance of healthy cholesterol levels. Physical exercise on a daily basis lowers the risk of stroke and heart disease. The American Heart Association (AHA) recommends that you exercise 30 minutes five days a week to enhance your heart health and lower your risk of heart disease. You can even split it up into three 10-minute sessions three times a day to make it more doable.

1.4.6. Exercise and Cancer:

Workout is among the most essential things you can do to protect yourself against a variety of cancers. Obesity and a sedentary lifestyle are responsible for up to one-third of cancer-related fatalities, including two of the most prevalent illness in the United States, breast and colon cancer. Many individuals exercise to avoid heart disease, but exercise may also help to prevent and reduce the risk of a variety of malignancies. To protect against colon cancer, endometrial cancer, and lung cancer, 30 to 60 minutes of moderate to vigorous physical exercise each day is recommended. Most studies link 30 to 60 minutes of moderate- to high-intensity physical exercise per day to a lower risk of breast cancer. However, one new research suggests that frequent strenuous activity may delay the development of prostate cancer in men 65 and older.

2. LITERATURE REVIEW

Laura Mandolesi et al. discussed about Biological and Psychological Benefits of Exercise [8]. Many studies indicate that physical activity (PE) is a powerful gene modulator that causes anatomical and functional changes in the brain, resulting in significant improvements in cognitive performance and well-being. PE has also been shown to protect against neurodegeneration. However, it is unclear whether this protection is provided by changes to the molecular processes that underpin neurodegeneration or by improved resistance to assaults. This concise review examines the biological and psychological benefits of physical activity, describing findings from animal and human studies on brain plasticity and epigenetic mechanisms in order to better understand how to maximize the benefits of physical activity while avoiding negative consequences, such as exercise addiction.

Louis Bherer et al. discussed a review on Effects of Physical Activity and Exercise [9]. There are many studies that support the idea that physical activity and exercise may help reduce the negative effects of aging on the body and mind. This survey of the literature offers an overview of key discoveries in this rapidly expanding field of study. The authors examine and analyze the findings of cross-sectional, longitudinal, and intervention studies with healthy older individuals, frail patients, and those with moderate cognitive impairment and dementia. These findings indicate that physical activity is a potential non-pharmaceutical strategy for preventing cognitive decline and neurological disorders as people age.

Miriam Reiner et al. discussed about benefits of physical activity [10]. The expense of treating noncommunicable diseases (NCDs) such as coronary heart disease and type 2 diabetes mellitus is increasing. Physical exercise is thought to lower the chance of developing certain illnesses. Cross-sectional research revealed that physical exercise is linked to improved health and that it may help to avoid the development of certain illnesses. The goal of this study is to synthesize the available data regarding the long-term (>5 years) link between physical activity and weight gain, obesity,

coronary heart disease, type 2 diabetes, Alzheimer's disease, and dementia. The findings of this research indicate that physical exercise has a long-term beneficial effect on a variety of illnesses.

3. DISCUSSION

Regular physical exercise may help you feel good about yourself while also providing a variety of health advantages. It lowers the risk of heart disease, stroke, high blood pressure, numerous malignancies, type 2 diabetes, and bone weakening, for example (osteoporosis). Regular physical exercise also aids in weight loss and stress reduction. On at least five days of the week, you should strive for at least 30 minutes of moderate-intensity physical exercise, but even 10 minutes is better than nothing. You should also try to perform at least a couple of muscle-strengthening exercises each week. This paper discusses about Exercise, types as well as benefits of Exercise and Importance of exercise in our daily life. This paper can be used for future study.

4. CONCLUSION

Exercise not only improves your physical fitness, but it also enhances your overall health and well-being. Physical activity and exercise may help people avoid illnesses including type 2 diabetes, cancer, and cardiovascular disease. Daily exercise may decrease stress and anxiety, raise happy hormones, promote self-confidence, boost brain capacity, sharpen memory, and strengthen muscles and bones. Physical activity and exercise may improve your health both now and in the future. Most significantly, regular exercise may help you live a better life. These advantages may be obtained by exercising for at least 30 minutes each day. This paper discusses about Exercise, types as well as benefits of Exercise and Importance of exercise in our daily life. Doing regular exercise will help people to remain fit and healthy physically and mentally. This paper can be used for future reference as researcher can further study on exercise.

REFERENCES:

- [1] J. W. Van Dijk, K. Tummers, C. D. A. Stehouwer, F. Hartgens, and L. J. C. Van Loon, "Exercise therapy in type 2 diabetes: Is daily exercise required to optimize glycemic control?," *Diabetes Care*, 2012, doi: 10.2337/dc11-2112.
- [2] D. Pabra, N. Sharma, S. Ghai, A. Hajela, S. Bhansali, and A. Bhansali, "Impact of post-meal and one-time daily exercise in patient with type 2 diabetes mellitus: A randomized crossover study," *Diabetol. Metab. Syndr.*, 2017, doi: 10.1186/s13098-017-0263-8.
- [3] A. Bricca, C. B. Juhl, A. J. Grodzinsky, and E. M. Roos, "Impact of a daily exercise dose on knee joint cartilage – a systematic review and meta-analysis of randomized controlled trials in healthy animals," *Osteoarthritis and Cartilage*. 2017, doi: 10.1016/j.joca.2017.03.009.
- [4] M. A. Elmagd, "Benefits, need and importance of daily exercise," ~ 22 ~ *Int. J. Phys. Educ. Sport. Heal.*, 2016.
- [5] J. L. Miles, K. Huber, N. M. Thompson, M. Davison, and B. H. Breier, "Moderate daily exercise activates metabolic flexibility to prevent prenatally induced obesity," *Endocrinology*, 2009, doi: 10.1210/en.2008-1035.
- [6] M. Zwerink, J. Van Der Palen, P. Van Der Valk, M. Brusse-Keizer, and T. Effing, "Relationship between daily physical activity and exercise capacity in patients with COPD," *Respir. Med.*, 2013, doi: 10.1016/j.rmed.2012.09.018.
- [7] S. J. Caton *et al.*, "Low-carbohydrate high-fat diets in combination with daily exercise in rats: Effects on body weight regulation, body composition and exercise capacity," *Physiol. Behav.*, 2012, doi: 10.1016/j.physbeh.2012.02.003.
- [8] L. Mandolesi *et al.*, "Effects of physical exercise on cognitive functioning and wellbeing: Biological and psychological benefits," *Front. Psychol.*, vol. 9, no. APR, pp. 1–11, 2018, doi: 10.3389/fpsyg.2018.00509.
- [9] L. Bherer, K. I. Erickson, and T. Liu-Ambrose, "A review of the effects of physical activity and exercise on cognitive and brain functions in older adults," *J. Aging Res.*, vol. 2013, 2013, doi: 10.1155/2013/657508.
- [10] M. Reiner, C. Niermann, D. Jekauc, and A. Woll, "Long-term health benefits of physical activity - A systematic review

of longitudinal studies,” *BMC Public Health*, vol. 13, no. 1, pp. 1–9, 2013, doi: 10.1186/1471-2458-13-813.