



## THE IMPACT OF PHYSICAL ACTIVITY ON OUR HEALTH

(Review study)

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### Abstract

With the increasing global prosperity in recent years, the issue of healthy living dominates the agenda, especially in developed countries. Physical activity and nutrition are important elements for a healthy life; It is very important for people to be healthy, improve their quality of life and therefore keep their body mass index at healthy levels (Günay, 2008). When we look at the factors affecting people's lifestyles, nutritional habits and physical activity levels come to the fore, and it is also seen that the rate of chronic diseases decreases in those who choose a healthy lifestyle. (Alpay et al., 2015). When looking at individuals with an active lifestyle and sedentary individuals in terms of nutrition, sedentary individuals consume at least as much nutrition as active individuals. However, since they do not consume as much calories as active individuals, the body mass index of sedentary individuals deteriorates. Based on this factor alone, it can be said that physical activity is an important factor in the fight against obesity (Pekcan, 2002). As a result of various studies conducted by the World Health Organization, it has been determined that physical activity affects human life in different aspects. Although there are important developments observed in recent years with the growth of the world economy and the increase in people's living standards; Chronic diseases occur in individuals who enter into a routine life cycle and adopt a sedentary lifestyle, and their body mass indexes deteriorate (WHO, 2000). Based on this, the aim of our study is to emphasize the importance and effects of physical activity.

**Keywords:** Physical activity; healthy lifestyle; sports, movement training.

## **1. Introduction**

Before industrialization, physical activity and exercises were a part of human natural life. However, the development of technology has affected people's lifestyle and style, so the natural role of physical activity, exercise and sports in people's lives has begun to disappear (Ay, 2018). After industrialization, people's mental activities took precedence over physical activities because the need for the body decreased. Looking at the present time, it is possible for people to meet even their basic needs from where they sit, without spending any energy (Ercan, 2020).

Physical Activity is defined as any body movement that results in the contraction of skeletal muscles and the release of energy produced at different intensities (WHO, 2020). From a different perspective, physical activity is all activities of different intensities and intensities in our daily lives that increase the number of heart beats per minute and increase breathing and breathing by consuming energy with the musculoskeletal system (Piercy et al., 2018). For example, house cleaning, walking, cycling, fitness, swimming, badminton, tennis, running, playing games and daily chores are considered physical activity (Ercan, 2020). In general, all skeletal muscle movements that cause an increase in energy expenditure are called physical activity. As physical activity increases, our body's daily energy expenditure increases. As the amount of energy we spend daily increases, the fat content in our body begins to decrease and the muscle percentage begins to increase. Accordingly, as muscle mass increases, the amount of daily energy spent also increases. This energy expenditure is examined under three basic components. These are the energy released by physical activity, our resting metabolic rate and daily food intake. The most fundamental component is our resting metabolic rate. It is the amount of energy that our body releases to maintain the temperature of all muscle systems and our body for all body functions, including respiratory and circulatory functions, during rest. 70% of the total daily energy expenditure belongs to the resting metabolic rate. An increase in the amount of energy is observed as the food taken into the body activates the digestive and excretory systems of our body. When we look at this rate, it is seen that it is 10%. The difference in the amount of energy between individuals arises from the amount of energy released by physical activity, which constitutes 20% of the total energy expenditure (Yürekli, 2022).

Looking around the world, cancers, cardiovascular problems and chronic airway hypersensitivity diseases caused 38 million of the 56 million deaths in 2012.. For a healthy life, it is important to determine the frequency, intensity and type of physical activity from childhood and increase it over time. Environmental factors have a significant impact when determining daily physical activities. There is very little research on the impact of environmental factors on physical activity. When people's body composition and body fat levels are considered, the initial condition tests of individuals with good levels are at good levels (Kuşgöz, 2005).

Physical inactivity, which affects all humanity due to developing technology, changing world order and global changes, is seen in the onset or early emergence of all diseases. Even during the Covid 19 epidemic that devastated the whole world globally, we witnessed that those who did sports had a better time during the illness than those who did not. We also found that those who were physically active in a spiritual sense were less affected. Considering all these, physical activity should be made a state policy and spread to larger masses and areas for a more athletic and healthy society. Therefore, the aim of our study is to emphasize the effectiveness of physical activity.

## **2. Method**

### *Collection of Data*

The research was conducted using the document review and scanning model. Document review and research involves the analysis of written materials that contain information about a targeted event or phenomenon. In the study, a literature review was conducted on physical activity, its importance, definition and effects on human health.

### *Data Collection Tool*

This study is a compilation research. In the research, documents found in the literature were analyzed as a data collection method. While scanning the literature; Pages from search engines such as PubMed, Dergipark, ISI, WOS, SportDiscus, Scopus, Google Scholar were used. While scanning, the keywords 'physical activity, its importance, its effect on health' were searched. An attempt was made to create up-to-date information by compiling and bringing together the obtained sources.

### *Statistical Analysis of Data*

Qualitative data analysis is where researchers organize their data, divide it into units of analysis, synthesize it, find formats, discover important variables, and decide what information to include elsewhere in the report. In other words, the researcher conducting qualitative analysis starts from the data he collects from the field. It tries to discover and reveal what is hidden in this data. Within the scope of this general information, works, articles and articles written about sports, health and physical activity and health are scanned, examined and interpreted within the scope of the reviews.

### **3. Results**

While various features such as fitness, endurance, strength and flexibility improve with physical activity, the circulation, respiratory and musculoskeletal systems develop positively. In addition, physical activity positively improves social development such as the relationship between success and performance, adaptation, sociocultural development, individual and team harmony, self-awareness and recognition. Children and individuals also develop emotional characteristics positively through physical activity. These; development of self-confidence, personality development, the individual's ability to express himself correctly, control his emotions and thoughts, and self-awareness (Arslan, 2014).

#### *3.1. Effects of Physical Activity on Mental and Social Health*

Nowadays, life is extremely stressful, especially for people living in metropolises. In addition to daily hustle and bustle, personal and social problems are also among the biggest causes of stress. It is known that stress causes many health problems. Your nervous system you may be stressed; It stimulates your body by secreting hormones such as adrenaline, noradrenaline and cortisol. The secretion of these hormones causes long-term chronicity.

Table 1. Effects of Physical Activity on Mental and Social Health

• Creates happiness,
• You feel good,
• The person spares time for himself during physical activity, and this time increases his tolerance towards life in a positive way,
• Physical activity helps the individual to control his weight, therefore it positively affects the individual's position in society,
• Communication skills improve,
• The time to cope with stress decreases,
• There is an increase in individuals' social adaptation and acceptance rates,
• A more positive outlook on life develops (Cana, 2012).

#### *3.2. Effects of Physical Activity on the Musculoskeletal System*

The effects of physical activity on the skeletal system increase muscle strength and flexibility, as well as improve dynamic balance. It also causes a decrease in bone density loss in post-menopausal women, a decrease in hip and spine fractures, and a decrease in the risk of falling. Bone enzyme activities increase in individuals who train regularly. In addition, bones, joints and tendons become stronger. Again, research shows that while the bone's resistance to fractures increases, bone hypertrophy (growth) occurs. Research has shown that with physical activity, the cartilages in people's joints become thinner and they become healthier.

Table 2. Effects of Physical Activity on the Musculoskeletal System

• Ensuring balance between muscles working oppositely between muscle groups,
• Improving muscle strength,
• Increasing muscle-joint control to ensure stability,
• Maintaining and increasing flexibility by increasing joint mobility,
• Maintaining and regulating the dynamism of the muscles,
• Increasing fitness and endurance during physical activity,
• Prolongation of lactic acid duration that may occur in the muscles,
• Positive development of reflexes,
• Maintaining posture and ensuring body smoothness,
• Developing the individual's body awareness,
• Decreasing the repair time of damage to the muscles,
• Maintaining muscle contraction and bone mineral density to prevent osteoporosis,
• A positive increase in the amount of oxygen and energy used in the muscle,
• A significant decrease in the body's reaction time to possible adverse movements (Bek, 2008).

### *3.3. Effects of Physical Activity on Other Body Systems*

In the programs created, progression steps should be determined by taking into account the frequency and duration of individuals' physiological activity. Thus, the positive effects of physical activity on health are increased and made permanent. Active lifestyle should be turned into a behavior. If the habit of physical activity is not turned into a regular program, body systems that are regulated

by activity for a certain period of time will quickly begin to lose the beneficial effects that occur after cessation of activity.

Table 3. Effects of Physical Activity on Other Body Systems

<ul style="list-style-type: none"> <li>• There is an increase in the amount of blood pumped by the heart at once,</li> </ul>
<ul style="list-style-type: none"> <li>• Heart rate decreases,</li> </ul>
<ul style="list-style-type: none"> <li>• Improvements are seen in heart rhythm,</li> </ul>
<ul style="list-style-type: none"> <li>• Blood pressure decreases, blood resistance of the vessels decreases,</li> </ul>
<ul style="list-style-type: none"> <li>• Reduces the risk of vascular diseases (high blood cholesterol, triglycerides, etc.),</li> </ul>
<ul style="list-style-type: none"> <li>• As the heart becomes stronger, the amount of blood the heart sends to the body increases and reduces the risk of heart attack. In addition, coping rate increases during a heart attack,</li> </ul>
<ul style="list-style-type: none"> <li>• Respiratory capacity increases and the amount of oxygen in the blood increases,</li> </ul>
<ul style="list-style-type: none"> <li>• Individuals who engage in physical activity are more successful in quitting bad habits than sedentary individuals,</li> </ul>
<ul style="list-style-type: none"> <li>• Regular physical activity helps control diabetes and blood sugar by maintaining insulin balance.</li> </ul>
<ul style="list-style-type: none"> <li>• It becomes a habit to turn the fat in the body into energy, speeding up the metabolism and increasing the proportion of muscle in the body,</li> </ul>
<ul style="list-style-type: none"> <li>• It helps reduce the effects of negative processes experienced during menopause by prolonging the time it takes for women to enter menopause,</li> </ul>
<ul style="list-style-type: none"> <li>• With physical activity, there is an increase in the amount of blood flowing to the brain, and with this increase, there is a decrease in the incidence of dementia and forgetfulness with advancing age.</li> </ul>
<ul style="list-style-type: none"> <li>• It prevents vascular damage in the brain,</li> </ul>
<ul style="list-style-type: none"> <li>• It has positive effects on sexual health in adults (Cana, 2012).</li> </ul>

#### 4. Discussion

It is known that physical activity has the same meaning as the words "exercise" and "sports" in the majority of society. However, these concepts are very different from each other. However, these concepts are used interchangeably in a large part of society (Caspersen, Pereira and Curran, 2000). When viewed from the perspective of motion, these three terms are related, but their application areas are very different from each other. From a movement perspective, physical activity is more comprehensive than the other two terms. Exercise is planned, regular and repetitive physical activities to improve individuals' physical fitness levels. Sports, on the other hand, is all of the activities performed by adhering to techniques, tactics and rules of exercise and physical activity. The most important feature that distinguishes sports from physical activity and exercise is that it is competitive and aims to win (Sancassiani et al., 2018). Exercise, Exercise is known as a subclass of physical activity. It is aimed at improving several elements of physical fitness. It is a continuous activity that is planned and voluntary (Petibors et al., 2002). Sport, Sports is known as a subclass of exercise. Generally speaking, it is a physical activity that has techniques, tactics and rules and focuses on maintaining and improving physical fitness. It has been determined that there are differences

according to sports regions. Competition and rules are essential in sports (Shephard, 2003). Physical Fitness, The increase or decrease of our performance during physical activity depends on our physical fitness. Physical fitness includes skeletal muscle endurance, speed, flexibility, proficiency, strength, power, balance, reflexes and body composition (Vanhees et al., 2005). It has been determined that regular elastic resistance band training in healthy young people provides improvement in muscle hypertrophy (Taşkın et al., 2020). There are many definitions of physical fitness. It is a combination of qualities aimed at increasing the frequency and duration of the physical activities we do. Frequency, duration, etc. of physical activity to increase physical fitness to high levels. In addition to these criteria, excessive fatigue should be avoided and regular sleeping hours should be maintained (Ay, 2018).

Physical activity is very important to protect our health. When choosing physical activity recommendations, evidence of the relationship between health and physical activity is taken into account. The most current information on this subject was reported in the 2008 US Physical Activity Guidelines Advisory Committee report. The following activities appear to be available with existing evidence to result in health benefits for children and young people when they participate regularly for at least 3 or more days a week (Oja and Titze, 2011). The positive effects of regular physical activity at least 3 days a week on our health are as follows:

- Regular resistance exercise increases the strength of the large muscles in our body.
- Aerobic physical activities performed regularly improve and improve the cardiovascular system.
- Resistance exercises and aerobic exercises reduce the metabolic risk of individuals.
- Bone health is supported by regular physical activities and regular nutrition and calcium intake.

Physical activities aimed at increasing muscle strength and quantity protect bone and muscle health, expand the usage areas of the musculoskeletal system and reduce the rate of injuries that may occur during physical activity. Research shows that the greatest public health gains can be achieved with muscle strength-oriented physical activities that work on the aerobic system for large muscle groups, for a total of 600 to 1200 MET-minutes per week, at least 3 days per week or more. (Oja et al., 2010). In addition, aerobic exercises positively improve body composition, that is, body mass index (Serin E, 2020). In addition, anaerobic exercises should be performed regularly to have a healthy body structure and performance capacity (Serin and Taşkın, 2019; Serin E, 2019). Physical activity should have a stronger role in primary healthcare, for example doctors and other primary healthcare professionals should have a role in physical activity. They must be able to make suggestions and recommendations and be well trained to carry this out. In addition, when the literature is researched, body composition and anaerobic performance are related to each other, and there is also a relationship between speed and agility. Therefore, explaining success in individuals who do sports regularly depends on variables that affect each other (Taşkın M, et al. 2017).

While the Health System is an important entry point for the promotion of physical activity, research shows that many healthcare professionals There is insufficient knowledge about the effects of physical activity on health and physical activity This shows that counseling is often not reimbursable in the current healthcare system. Member States, Promoting human-powered transportation, physical activity in daily life, including in the community and in the workplace Action must be taken to increase activity and increase physical activity through the health system. Workplace Those who do not have a job to focus on their environment or work from home should not be neglected. Research

shows unemployed adults or low-income adults, persons with disabilities, and housewives, especially those with young children. including, but not limited to, that vulnerable groups are difficult to reach and need to be given special attention. is pointing. Successfully promoting physical activity in socially disadvantaged groups There appears to be a broader approach to social exclusion in which physical activity is not the only issue addressed. approach is required.

## **5. Conclusions**

Both the health status of individuals and to positively impact their lives By increasing social awareness, regular physical activity should be encouraged. Physical activity is one of the basic conditions for having a healthy body. Many health problems arise due to factors such as today's modern lifestyle, inactivity and sitting habits. Physical activity plays an important role in preventing these problems and leading a healthy life. It shows that regular physical activity improves overall health and quality of life. A well-planned program should include these four types of exercises every week. Aerobic exercises should be at the center of this program. days of the week widespread, regular and moderate intensity exercises to maintain health and may be sufficient for development. Organised physical activity, reduced risk of premature death It is associated with primary disease in various chronic diseases. and is important for secondary protection.

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