NORDIC WALKING AS A FORM OF RECREATION

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Abstract Recently introduced on the Polish market, the Finnish product under the name of Nordic Walking gains more and more supporters and followers. When trying to determine the essence of Nordic Walking we should first define the term "physical activity" and "recreation". Nordic Walking belongs to a general motor activity. Physical activity is the amount of exercise or physical activity needed to develop and maintain one's health. Quite a simple technique of motion while walking with poles, the possibility of maintaining control of exercise intensity and relatively inexpensive (compared to other disciplines) sports equipment contribute positively to the versatility of Nordic Walking and its availability to any person interested in this sport. The march with the poles is one of the most commonly undertaken, and the most natural form of exercise in everyday life, especially for people in middle and old age, as these particular age groups dominate in Nordic Walking. It does not require large financial outlays or specific time and place, as opposed to practicing fitness or bodybuilding. One can just go out for a daily walk and simply take the poles with them.

Key WOPIS recreation, nordic walking, sport, physical education

Recently introduced on the Polish market, the Finnish product under the name of Nordic Walking gains more and more supporters and followers. Quite a simple technique of motion while walking with poles, the possibility of maintaining control of exercise intensity and relatively inexpensive (compared to other disciplines) sports equipment contribute positively to the versatility of Nordic Walking and its availability to any person interested in this sport. It also appears (as shown by a number of studies), it is a safe form of exercise in terms of health, as, to some extent, this specific march protects joints that are the most vulnerable to injuries, so now Nordic Walking is not only recommended by instructors who promote an active lifestyle, but also by physiotherapists and doctors who care for patients' rehabilitation and their recovery after diseases and treatments or surgeries.

Nordic Walking has been a big hit in many European countries and in North America. This sport is mostly practiced by people over 30 years old who choose a moderate activity, and most importantly – a systematic one. There is great hope that Nordic Walking will settle on for longer in Poland. So far, conducted research and

promotional activities indicate that the active part of Polish society is open and willing to accept this new form of exercise (Antosiewicz, 2016). Participation in practical classes under the supervision of qualified instructors gives practitioners the opportunity to learn about Nordic Walking from the practical and theoretical side as well as acquire technical skills of "walking with poles", which can be used by any active person in their free time.

When trying to determine the essence of Nordic Walking we should first define the term "physical activity" and 'recreation'. Nordic Walking belongs to a general motor activity. Physical activity is the amount of exercise or physical activity needed to develop and maintain one's health. The correct course of physiological and metabolic processes is conditioned by the need to ensure the optimal amount of activity for a human body, or at least a minimum amount of exercise. In short, physical activity is essential to the health and balance of the psycho-physical organism (Bielski, 1996).

Dudziak writes that "human physical activity is one of the most important factors stimulating its development. Participation in various forms of physical activity develops human health capabilities, it is also an excellent means of forming interpersonal relationships, as well as an important element of the socio-cultural development of our civilization" (Dzudziak, 2011). The range of physical activity is very wide. In making the physical effort we should pay attention to the individual capabilities of the organism.

Appropriate amount of physical activity has a beneficial effect on lipid and carbohydrate metabolism, blood clotting, biochemical changes of the myocardium and the walls of blood vessels, endocrine system, nervous system, restoring mental balance, respiratory system, increasing efficiency, and motor system, improving their structure and functions (Szwarc, 1979). R. Oleksy believes that "systematic physical exercise influences the increase of somatic development, which is widely presented in numerous Polish and foreign experiments. They prove that a training group of young people reach a significant advantage over their peers who did not train in such growth characteristics as height, weight, chest and limbs girths" (Oleksy, 2012).

Physical activity improves the health in various ways. It is the cheapest and easiest way to prevent many diseases. Doctors report that the current sedentary lifestyle, 'compulsive' leisure time in front of a TV or computer monitor, and hence the general lack of habit of exercises, in a decidedly negative manner impact not only the wellbeing, but above all – the human health.

Training, especially aerobics, causes an expansion of vital capacity; the maximum ventilation increases, enhancing the overall body strength. Regular exercising increases the volume of blood circulating in the body which results in faster removal of harmful substances and waste products from the body, resulting in faster biological restoration (Oleksy, 2012).

Lack of exercise causes metabolic processes' disorders and negatively affects the psyche and the ability to cope with stress. The natural need for movement, which manifests itself in early childhood, decreases with age, but still remains an important factor in maintaining health, youth and immunity to all diseases of civilization, arising from metabolic disorders –(diabetes, atherosclerosis, heart disease and cardiovascular diseases). The factors responsible for the lack of adequate physical activity are due to education and the lack of habits of participating in recreational sports. The reason for the lack of movement is the overload of professional work, financial and organizational limitations, spending free time in front of the TV or the computer, lack of universal fashion to practice physical exercises, etc. (Maszczak, 1995).

The term "physical recreation" refers to activities of the sports and movement content, such as: sports games, dancing, hiking, walking, which one participates in willingly in their free time, which otherwise could be meant for rest, renewal of strength, pleasure, creation of health and personal development.

The objectives of recreation are:

- motion necessary to meet the needs of health-terms of prevention of metabolic diseases (obesity, diabetes, atherosclerosis, heart and vascular diseases, musculoskeletal system, anxiety, lack of immune capacity of the organism),
- daily energy balance of the human body maintaining a healthy weight,

 the improvement, maintenance and construction of fitness and physical efficiency, and indirectly psychological stability

- the achievement of pleasure and satisfaction with physical activity (Toczek-Werner, 2008).

Physical activity becomes fashionable again, and alongside the traditional disciplines cultivated unprofessionally, it becomes apparent that the Poles assimilate innovative forms of healthy exercise, such as Nordic Walking, which has "conquered" the urban population of both sexes and across the age span.

To define the type of physical activity that Nordic Walking represents, one can use the definition of the Polish Federation of Nordic Walking, which says that it is a combination of the march of technology repulsion from the substrate using a specially designed poles, which involves the skillful use to work the muscles of the upper half our body. Unlike trekking, where the poles are mainly used to support, (http://www.podkarpacie.pfnw.eu).

Nordic Walking's roots date back to ancient times, when the shepherds and the pilgrims used sticks to support themselves while walking in difficult terrain. Another source of Nordic Walking can be found in the summer ski training. People participating in the above-mentioned discipline have used sticks for decades to make their summer workouts more effective. Nordic Walking originated in Finland and now it becomes more and more popular around the world and also – slowly – in Poland (Figurski, Figurska, 2010). The first Nordic Walking center in Poland was established in Barlinek.

While walking with poles with proper technique, about 90% of the muscles of the human body is working. The poles relieve the bottom, often overloaded parts of the body (knees, hips and lumbar spine cutter) and activate the upper body (cervical spine and shoulders).

Nordic Walking can also be defined as a form of physical activity in the field, consisting of walking and using poles adapted from the cross-country skiing. Invented by experts from the world of sport and medicine, Nordic Walking is a variant of fitness walking technique which makes use of repulsion from the substrate by means of specially designed poles, which involves the skillful use of the upper half of the body during a brisk walk (Mittermaier, Neureuther, 2010).

Currently, it is estimated that this form of physical activity is practiced by about 7 million people around the world. Nowadays, where free time is occupied mostly by computers or television and fast food is the most common meal, it is difficult to encourage people to any physical activity. This is caused by a sedentary lifestyle, which is substantially the cause of obesity and various systemic diseases, diabetes, dysfunctions of locomotor system.

Walking is the most natural and healthy form of exercise; brisk walking or cross-country marches support fitness and help get in shape. Nordic Walking is a combination of march and a technique of pushing back from the ground by using sticks. Nordic Walking does not make many demands, one does not need to learn any complicated skills. It is relatively simple to master, just two sticks and a bit of self-denial (Burger, 2010).

The technique of Nordic Walking is a combination of traditional marching and pushing back from the ground by using sticks, which is inspired by cross-country skiing. The simplicity and ease of such activity, and also its safety, allows people at different ages and in different physical condition participate in training. Nordic Walking can be practiced in any area on all surfaces, throughout the year and by everyone.

Nordic Walking training should start with walking with poles hanging loosely at one's sides, hands outstretched, looking for a suitable rhythm of the march. After finding that rhythm, the next stage is to connect the step with pushing the sticks back with the opposite hand. Based on the stick handle, one should loosen the fingers, grip the handle and the upper part of the trunk by rotating in the opposite direction to straighten the joins of the hand. One should not extend the bottom of the stick to the front (Burger, 2010).

At first glance, Nordic Walking resembles cross country skiing. Correctly handling the sticks is crucial for a proper technique. The tip of the stick is always directed slightly to the back. The right stick is to be put down when the right foot touches the ground. The longer the stick is in contact with the ground, the more effective the training is. The process of movement – if it is done correctly – is dynamic and harmonious (Mittermaier, Neureuther, 2010).

Each Nordic Walking training consists of several of the following steps:

- a warm-up in which a special set of stretching and warm-up exercises is performed,
- proper training that is march with sticks from leisurely pace to progressively more vigorous one,
- short pause during which one stretches the back muscles,
- training after the break calmer, relaxant form of march.

The effects of Nordic Walking on health are probably undisputed. This 'magical' walk for health in the footsteps of the Finns', the pioneers of Nordic Walking in the world, combines all that is important in the promotion of health and prevention. Nordic Walking has three levels of activity – health, fitness and sports (Schwanbeck, 2013).

We can specify the following health benefits:

- 1. Strengthens the cardiovascular system.
- 2. Reduces high blood pressure, blood sugar and blood cholesterol.
- 3. It lowers resting blood pressure.
- 4. Involves large muscle groups throughout the body, activates 90% of the body muscles.
- 5. It activates the upper part of the spine and relaxes tension in the neck and shoulder area.
- 6. increases oxygen consumption by an average of 20–58% depending on the intensity of the driving poles.
- 7. Relieves the locomotor system up to 30%, especially all the knee joints and the lower spine section.

It is also important, next to the relax, what is also most commonly expected from a sport that is burning calories, Nordic Walking is extremely effective. It is more intense than during walking without poles (by about 40%), wherein the strain on joints and the spine (in case of equality of the substrate) is much less – the use of the poles during the hour training is compared for example with the passage of the load reduction about a dozen tons, while coaching endurance, strength and flexibility.

Good mastery of Nordic Walking is relatively easy, but it requires professional instruction in order to fully reap the benefits of health and not cause oneself harm. If we add to this the undeniable social values during training in a group, the benefits of outdoor exercise in direct contact with nature during the long 'ordered' marches with biomechanically upright silhouette, we obtain an effective way to year-round health-promoting training, possible to serve in any area without having to search fitness centers and special clubs. One can also mention the health effects when having a rehabilitation (correcting bad posture or orthopedic injuries).

Nordic Walking is a pro-health and suitable for all regardless of age, gender or fitness level, especially for those who:

- need to lose weight for health purposes, as it effectively 'eats' calories by involving large muscle groups,
- want to effectively strengthen almost every muscle in their body in Nordic Walking energetic work of the
 arms increases the speed, adding sticks and good technique creates the upper limbs resistance which
 leads to engaging the muscles of the abdomen, chest, back and shoulders,
- have orthopedic problems, balance disorders, and cannot burden the joints Nordic Walking reduces the load on the knee joints of obese people, and well-chosen poles allow to maintain correct posture and stability while walking,
- have problems with mobility of the upper spine and muscle tension around the shoulders and neck Nordic Walking relieves the pain surrounding neck and shoulders, it improves their mobility and increases the mobility of the chest,
- cardiac patients who seek a safe form of physical activity Nordic Walking lowers resting blood pressure decreases cholesterol (HDL increasing) and activates the mobility, and hence the weight loss,
- are elderly and want to practice a healthy physical activity Nordic Walking is a safe form of exercise, regardless of age when walking pace is properly adjusted,
- need motivation to increase their physical activity Nordic Walking is 40% more efficient than regular walking and less strenuous than running (http://www.nordicwalking.com.pl).

Marching with poles improves the mood and has a positive effect on reducing depression, stress and psychophysical fatigue. This is a new, amazingly fun, very addictive and gradually improving the condition form of walking.

Unlike ordinary walking, Nordic Walking involves the use of force put upon the poles on both sides. Therefore, Nordic Walkers use more parts of their body (though with less intensity), and thus stimulate the chest muscles, triceps, biceps, shoulders, abs and other muscles in a manner that is different from the stimulation caused by regular walking. This muscle involvement leads to higher reinforcement than that obtained by means of ordinary walking or jogging.

In summary, one can say that recently more and more is said in Poland about the validity of the promotion of a healthy lifestyle, maintaining good form through physical exercise for health rather than for extraordinary sportsmanship and physical fitness. Today's life is manifested by daily rush and stress of work, and what is worse – an unhealthy diet filled with irregular and hastily consumed meals. Many people spend their working day in a highly non-ergonomic position leading to stiffness and pain in the spine, neck and shoulder girdle. Insufficient physical exercise during leisure time causes the heart muscle atrophy as a general weakness of all muscles. An increasingly busy person, submitting an unhealthy diet rather than motor activity, begins to gain weight and so their cholesterol level increases. As a result of all these factors, diseases become a serious threat.

Therefore, the march with poles is undoubtedly the most commonly undertaken, and the most natural form of exercise in everyday life, especially for people in middle and old age, as these particular age groups dominate in Nordic Walking. It does not require large financial outlays or specific time and place, as opposed to practicing fitness or bodybuilding. One can just go out for a daily walk and simply take the poles with them.

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