

# The Wellness Activities in the Ageing Process

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## ***Anotation***

*The article contemplates the significance of wellness/physical activity in the old age. These activities are perceived not only as a factor supporting their independence but also as the way of social isolation prevention and a source of positive emotions.*

## ***Key words***

*Wellness activities, senior, outdoor activities.*

A sport physical activity presents one of the basic priorities of a human being and is a component in all parts of our modern society. A well balanced personality in bio – psycho – socio – harmony characterises a spiritual well being of each individual.

A healthy lifestyle and life quality have a positive impact on the mental health of seniors and other social activities result in the prevention of social isolation of the elderly generation.

The Czech government has prepared so called “National Program of Preparation for Getting Old 2008 – 2012”<sup>1</sup> The goal of the program is to support the society for all age group enabling dignified old age life in safety and participation in the life of the society.

## **The Significance of Physical Activities in the Elderly Age**

Sufficient amount of regular and suitable physical activity is not only the essential of good health state but also the factor that helps to maintain a good physical condition. Sufficient amount of physical activity in childhood is the main condition of the good health and efficiency in the adult age and good overall state in the elderly age.<sup>2</sup>

If there is continual practice of physical activities through the whole life, regular medical, functional and preventive examinations in the elderly age shall just supervise their suitability and safety. It has been proved that with an active lifestyle live longer than those kind of couch potatoes. The current research has shown that exercising helps to preserve the brain functions thanks to the stimulation of blood circulation. It is assumed that suitable programs of physical exercises can prevent the degradation of heart functions, muscular atrophy and joint flexibility.<sup>3</sup>

The beneficial effect is reflected in many areas. The physical load reinforces the muscle fibres of the heart enabling adaptability to heavier load. Physical activity improves the glucose tolerance, increases the sensibility of insulin receptors, slows down the bone

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<sup>1</sup> Národní program přípravy na stárnutí pro období 2008 – 2012. MPSV. Dostupný z [www](http://www.mpsv.cz/cs/5045)  
<http://www.mpsv.cz/cs/5045>

<sup>2</sup> MÁČEK, M., RADVANSKÝ, J., et al. *Fyziologie a klinické aspekty pohybové aktivity* . 1. vydání. Praha: Galén, 2011. 245 s. ISBN 9788072626953.

<sup>3</sup> HÁTLOVÁ, B. a kol. *Psychomotorická terapie demencí v počáteční a střední fázi*. Praha: European Science and Art Publishing: Asociace psychologů sportu, 2010, s.15. ISBN 978-80-87504-00-0.

degradation, increases the muscle power. The reduction of muscle tissue is a natural process of aging but exercising may stop it. Even the cell anti-oxidation system adaptability improves. The physical activity also increases the level of density lipoproteids that affect in the atherogenic way and affect the fibrosis in a positive way. Exercising thus reduces the risk factors of arterial sclerosis. The risk of a tumor is 3-5 times lower.<sup>4</sup>

Many authors also prove that the individuals who practice regular exercises have better image and sensation of themselves. Their self assessment relates to perception of themselves as a capable and well-looking individual.<sup>5</sup>

A close attention must be paid to the locomotive system. Its state is crucial for any physical activity. The aging process itself decreases its functional capabilities and any insufficiency, disorder or illness even more. The condition of the locomotive system in the elderly age often tells us about the kind and amount of physical activity. Genetics of course plays a key role but physical activities and lifestyle are significant

When we plan suitable activity program, we must consider not only the condition of the locomotive system but also the previous experience of the person. Too strenuous workout may even cause acute muscular inflammation..

If we want to prevent various negative aspects that accompany the aging process, we must focus on targeted stretching prone to get short and select such exercises leading towards the increase of power of the flaccid muscles, while avoiding rapid and jerky movements.

When planning activities we should select suitable and considerate. For example we can consider using walking sticks when planning outdoor walks for seniors and take similar precautions.

### **Suitable Activities for Seniors in Wellness**

We should prefer dynamic activities eliminating static load.

The basis are as follows: maintaining functions and overall conditions and avoiding overload. Most specialists recommend moderate or lower intensity. The untrained individuals shall exercise at 50-60% of their heart rate maximum. After several weeks it is possible to increase to 60-70%. The cardio-fitness activity is suitable to include twice or three times a week for 40 – 60 minutes in the program. The time shall be distributed as follows: 50% aerobic activity, 20% power training and 30% coordination, flexibility and balance.<sup>6</sup>

However, nowadays we can hear opinions that the activity structure should change towards more strenuous activity such as resistance training and power workout can be included.

Power (resistance training) helps to maintain the muscle tissue at the desired level even in the high age, it prevents the muscle imbalance and so relieves the pain. The risk of falling down is decreased thanks to better coordination. The bone tissue is stimulated and resists the osteoporosis better.<sup>7</sup>

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<sup>4</sup> WEBER, Pavel a kolektiv. *Minimum z klinické gerontologie pro lékaře a sestry ambulanci*. 1. vyd. Brno: IDVPZ, 2000. 151 s. ISBN 80-7013-314-7.

<sup>5</sup> ŠTILEC, M. *Program aktivního stylu života pro seniory*. Praha: Portál, 2004. ISBN 80-7178-920-8.

<sup>6</sup> DÝROVÁ, J., LEPKOVÁ, H. *Kardiofitness: Vytrvalostní aktivity v každém věku*. Praha: Grada, 2008 ISBN: 978-80-247-2273-3 .

<sup>7</sup> SYSLOVÁ, V. Fitpark. Dostupný z www < <http://www.fitpark.cz/reportaze/54/napsala-nam-mudr-vlasta-syslova.html>>

Suitable aerobic activities include dynamic walks, touristic, exercising, water exercises, swimming, cycling, shooting.<sup>8</sup>

Outdoor activities are very suitable not only as a locomotive activity but also as a preventive measure of social isolation and support the contact with nature which is important for the human wellbeing. Among the suitable outdoor activities can be included: touristic, Nordic walking, ski walk, bike ride (for those who are used to it), golf. The elements of adventure therapy can be applied in realisation of group outdoor activities.

The programs of suitable therapy that do not include a high level of physical effort should stress such elements as social/mental adventure.<sup>9</sup> At the same time, we can use these elements to encourage the social interaction in the group of seniors.

Further suitable physical activities that respect the level of mobility and condition are the water exercises and swimming (eliminating dives and diving). Rehabilitation exercises (on chairs and balls) health physiotherapy, breathing exercises, circle and social dance, locomotive and psycho-motor games, petangue.

The physical activities aim at:

- self-confidence support, self-respect, self-sufficiency, independence;
- prevention of social isolation;
- improvement or maintenance of physical, mental and social health;
- finding an active way of leisure time spending;
- support of the society discussions over the topic of active retirement age;
- increase of creation of new relations, and active fulfilment of the senior life;
- awareness of the own potential;
- support of the interest in one's self and the environment;

Shall the activities fulfil its targets, the individual practicing them must be aware of the methodology and technique of the activities (essential locomotion such as walking) and the intensity must be within their limits (each senior should be examined in a load test) and the principal of gradual load and warm up must be strictly followed (stressed is also proper body posture and positions). For seniors, we must also include a regeneration part of exercising (relaxation and the rest values of heart rate and blood pressure must be within proper limits).

The limiting factors of each activity are health and physical disorders and insufficiencies that are more frequent as we get older. Improper and excessive load lead towards fast worn out of the organism. The organism may adopt to the load but pathological reactions are initiated in the elderly age and later they result in health problems and manifest illnesses. The result of such acting is then different than we would expect. For example in a game of tennis there is a high risk of overload and blood pressure increase if the player does not use proper technique and relaxes through the game. Certain negative effect can also have household jobs

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Comp. KALVACH, Z. , HOLMEROVÁ, I. Geriatrická křehkost – významný geriatrický fenomén. *Medicína pro praxi* .č. 5, 2008, s. 66–69. ISSN - 1214-8687

<sup>8</sup> HÁTLOVÁ, B. a kol. *Psychomotorická terapie demencí v počáteční a střední fázi*. Praha: European Science and Art Publishing: Asociace psychologů sportu, 2010, s.15. ISBN 978-80-87504-00-0.

<sup>9</sup> KIRCHNER, J., HÁTLOVÁ, B., HOŠEK, V. Role dobrodružné terapie v psychiatrické léčbě. In HÁTLOVÁ, B., KIRCHNER, J. *Kapitoly z teorie psychomotorické terapie*. Praha: European Science and Art Publishing: Asociace psychologů sportu, 2010. 163 s. ISBN 978-80-87504-02-4.

(gardening, strenuous handwork or even knitting) as imbalanced load in sport lead to muscle imbalance as well as other one-sided load activities.

## **Suitable Sample Activities in Wellness in the Elderly**

### **Morning Exercises**

The morning get up is a lifelong routine. The way we spend it is very important and the whole day results from it. Unfortunately waking up in the senior age is not as fresh and quick as it used to be. The whole body is stiff in joints and something hurts here and there. Therefore it is advisable to prepare the whole locomotive system to the day activities.

It is recommended to practice an everyday warm-up stimulating the blood circulation through a set of exercises. The nervous system can be tuned into positive mood and thinking if we begin the day with a good mind.

### **Breathing Exercises**

The breath has a significant meaning for human body as it provides the gaseous exchange and oxygen supply needed to transform the nutrients into energy. Through breathing we are able to control all regulation processes. These are the reasons for which we must pay close attention the breathing stereotypes. When practicing these, we focus on different types of breathing i.e. so called breathing wave. The breath in and out we make through the nose and so we must overcome the resistance of the upper airways that directly supports the proper and straight body posture.

The organism of an individual weakened by a lung disease can even in the elderly age adopt to the suitably selected physical activity that respects the pathological changes in the lung functions and do not overload the weakened organism.

The breathing exercise relieves the muscles of the chest and shoulder joint and improves the coordination of breathing and motions. Breathing and relief of airway obstructions is easier. Of the same importance is also the locomotive activity that initiates deeper breathing and is stronger impulse supporting the improvement of load tolerance because it increases the demands on the blood circulation and metabolism. The breathing economy gets better and the amount of breathing work is decreased.

### **Walking**

Walking is a physical activity suitable to maintain the human physical and mental health at any age.

It can be well included among everyday activities. We may walk alone or in a group, walking (30minutes a day) can be the same efficient (especially speed walking at 6-8km/h) as jogging but has no harmful effects.

It is also easier and less dangerous than bike riding. In fact it is the exercise that is the most suitable for our organism and to our physical abilities (high number of muscles participates in it). The organism relieves stress, gets more oxygen but people with hypertension, severe diabetes and joint (hip) problems must be careful even when walking and consult any activity with a doctor.

An excessive load may cause joint inflammation and development of arthritis.<sup>10</sup>

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<sup>10</sup> HÁTLOVÁ, B. a kol. *Psychomotorická terapie demencí v počáteční a střední fázi*. Praha: European Science and Art Publishing: Asociace psychologů sportu, 2010, s.15. ISBN 978-80-87504-00-0

### **Nordic walking**

The Nordic walking is another suitable physical activity for seniors. This kind of sport comes from Finland. It is a natural, safe and very efficient activity. It is just walking with sticks that activate the muscles of upper body and relieve the tension in the cervical part of spine. 90% of the body muscles get involved. The circulatory and immunity systems are improved, high amount of calories are burnt and the sticks give better support and stability, the senior feels safer. It is a suitable alternative for the people who suffer from degenerative joint diseases. It is easily available for everyone as there is no need for special equipment or high investment.<sup>11</sup>

### **Exercise in Water**

Water enables the movement without static load and is very suitable for seniors because it improves the joint flexibility and muscle tonus. The repeated movements while swimming develop the endurance and coordination of the muscle and nervous systems. Some of the exercise can be practiced just in a bathtub.

The muscles of back, shoulders and limbs get strengthened together with the heart and lungs.<sup>12</sup>

### **Bicycle Ride**

Recreation cycling brings overall benefits. The muscles of back, shoulders and limbs get strengthened together with the heart and lungs. At the same time it is an easy means of transport through the countryside and does not overload the joints. However, the postural lability is increasingly limiting.

### **Shooting**

This activity serves as a very suitable means that strengthens the postural muscles, overall body stability and necessary to maintain the body postures. As for the mental functions, it improves concentration, self control and motor nerve functions. It has proved to be a very suitable method of somato-psychical training for the people with decreased locomotion abilities.<sup>13</sup>

### **Relaxation**

Most of the physical and mental problems are caused by stress nowadays. The only possibility to avoid stress is relaxing.

The point of relaxing is deliberate relief of stress by targeted and concentrated fine effort. The relaxed muscles stimulates the psychological ease and harmonisation of internal functions. A very close attention must be paid not only to the motion itself but also to the feelings initiated if we want to reach the psychological ease. Important is the recognition between tense and relaxation state. The human body is our tool and we can concentrate on the tonus in certain parts of the body. This is the art of concentration and avoid doing automatic exercises.

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<sup>11</sup> POLHORSKÁ, Miriam. Optimální pohyb pre seniorov. *Sestra a lekár v praxi*. roč. 8, č. 7-8, s. 13, 2009. ISSN 1335-9444.

<sup>12</sup> HÁTLOVÁ, B. a kol. *Psychomotorická terapie demenci v počáteční a střední fázi*. Praha: European Science and Art Publishing: Asociace psychologů sportu, 2010, s.15. ISBN 978-80-87504-00-0.

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Each motion should be felt and deeply exercised. When we manage the previous, we can then focus on the breathing and relaxation component of the exercise

## Yoga

The ancient and contemporary yogis understood the enormous importance of breathing and created the most complex system of breathing exercises that has been practised until these days. The yoga origins come from India where it was originated several thousand years ago and the knowledge has been passed from the masters to their trainees by word.

Yoga has been renowned as an activity that enables an individual to improve the life quality.<sup>14</sup> Yoga has been developing together with the society but never lost its heart. It helps to get rid of tension, restlessness, depression, conflict or illness.

Let's stress in the end, that the demographic development heads towards increase in the senior population percentage. The life length extends, medical care improves and the demands on higher life quality of seniors increase. Therefore it is necessary to create suitable conditions for worthy retirement and active lifestyle. We must support suitable conditions and help to select suitable physical activities that will not only satisfy the physical needs but also provide joy and satisfaction.

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