

## Physical Activities as Obesity Prevention Tools

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## **Obesity Prevention Tools**

Obesity is one of the basic medical and social problems of today's world. In recent decades, obesity has dramatically increased worldwide (e.g. in the United States more than 35% and in Europe more than 20% of adults are obese. It is a problem in both developing and developed) [1-3] countries.

Deficits in motivation, self-efficacy, and self-esteem, sedentary lifestyles and psychosocial problems complicate treatments for obesity. Thus, a comprehensive management approach needs to address these issues as well. However, conservative weight-reduction programs often fail or patients regain weight initially lost because motivation for weight maintenance decreases [4].

There are two primary causes for the increase in world obesity: lack of an active lifestyle and poor nutritional habits [5-8]. Fortunately, inactivity and poor nutrition are causes of obesity that can be altered through intervention. If no intervention takes place, subjects could suffer many of the physical and emotional side effects of obesity.

Lack of exercise is a phenomenon of contemporary lifestyle. The result is not only the increasing prevalence of overweight and obesity in all population groups, as well as reducing the prowess and potential for long-term reliable performance. Overweight or obesity is not only an aesthetic problem, but also means a number of complications, health and employment.

The basic prevention tool for overweight and/or obesity reduction is currently to change the prevalent sedentary lifestyle to an active, where an important role is played by physical activity.

Hypokinesia and resulting complications are one of the major consequences of a contemporary, sedentary lifestyle. In addition to declining efficiency, a reduction in the conditions for work and the marginal time spent pursuing leisure time activities all contribute to and are cited as the most frequent reasons for the rise of population an overweight and/or obesity [7-10].

Causes of adulthood obesity can be found in an inappropriate lifestyle of contemporary adult population. Lifestyle is undergoing substantial changes. Recent times have seen a continuous decrease in the performance of physical activities, both spontaneous and organized [7,11]. Research has shown that the amount of physical activities performed by adults of both sexes has decreased by approximately 15% in the last two decades, while energy intake during the same period virtually stagnant [6,7,12].

The volume of realized PA is also dependent on the age, and decrease with growing age [6,12]. This stems in unsuitable conditions for the implementation of PA adult and the lack of knowledge about prevention of obesity.

Walking is a primary physical activity for that may be used in subjects without of regular physical training. Walking is a weightbearing form of aerobic exercise that can be easily integrated into one's daily life and it is frequently recommended as a way to help protect against health problems and low working and leisure capacity. Major advantage with walking over running is that it has a lower frequency of injuries and that in a group of patients the probability of exceeding of security level is lower than in running. Still, keep in mind that the great advantage of priority intervention program that uses walking, is the use of movement activities associated with everyday activities [13-15]. By application of walking like a group exercise form it is very important that exercised subjects are able to communicate during the exercise, what can contribute to the wellness of these subjects [16].

According to our results the full job subjects are able to realize daily number of steps from the 6900 to 9100 steps. Although it was not required in all cases reached 7000 to 10000 steps a day respectively [14,17,18] it can be concluded that the proposed amounts in the Czech Republic and probably in other developed countries you can handle without major disruption to the existing lifestyle.

Subjective and objective methods of activity monitoring can be used, including self-report and portable monitoring devices-such as pedometers and accelerometers. However, evidence suggests that subjective measurements of ambulation do not always correlate well with objective findings. Therefore, the use of activity monitors can allow for efficient monitoring of ambulation without causing undue burden on older individuals.

There are many types of activity monitors available, each with its own device-specific algorithm for detecting steps or activity counts. While activity counts provide detailed information about the intensity of a variety of activities performed, step counts are specific to ambulation and are easily interpreted by researchers, clinicians, and participants alike [19]. Gait patterns in females can be quite diverse, however, and monitors may produce inaccurate recordings if individual exhibit altered or inconsistent gaits. Gait with a walker is associated with smaller variations in the base of support and in the displacement of body's center of gravity. Subjects who use walking aids frequently also demonstrate reduced gait speed, which has been associated with increased activity monitor error [19,20].

Findings reported from epidemiologic studies of the long-term effects of weight loss generally have not lent support to the notion that losing weight improves health and increases longevity. Most such studies have focused on the effects of weight change on all-cause mortality, and they have reported that mortality is in fact highest among persons who lose weight or gain excessive weight and lowest among those who gain a modest amount. However, these studies are subject to a number of important limitations. For one, they often do not distinguish voluntary from involuntary weight loss; the latter may be indicative of subclinical disease affecting mortality risk. In addition, although these studies typically control for smoking habit, they do not control for recent smoking cessation, which is associated with weight gain as well as improved mortality. They also do not control for weight cycling (i.e., repeated weight loss followed by weight gain), which may increase mortality risk independent of actual weight change.

Finally, these studies rarely account for relative weight or other important risk characteristics at study entry. Weight loss among persons who are already underweight may increase mortality risk, for example, and survivors of a heart attack or stroke may voluntarily lose weight but nonetheless have higher mortality rates than persons who gain a modest amount but do not have preexisting cardiovascular disease. A recent prospective study that controlled for many of these potential confounders reported substantial reductions in mortality among middle-aged women with obesity-related health conditions after intentional weight loss.

Due to these controversial findings it is always necessary before starting an intervention program aimed at modifying the body mass consider the potential risks due to the obvious benefits. It must always remember that there is no absolutely safe physical activity.

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