

Obesity and its hand-in-hand insulin resistance in recent decades

become the most common diseases in the world. The increase in the incidence of obesity and metabolic

syndrome is a worldwide public health-care and clinical problem . what is

worse , obese people every day constantly increasing enormously and gets so

nature of the global epidemic . The increasing incidence of obesity is related to the take-over

American lifestyle . People today spend their time watching television and especially in their

offices, eat fast foods and instead of moving to carry in cars. this

way of life passed on to their children , and so today we observe a significant increase in obesity

even in the youngest age groups. These children have unfortunately increased chance of staying

obese in adulthood.

The world today is 1.1 billion adults are overweight or obese

and these are about 320 million people obese (BMI > 30). Different regions of the world

differ significantly with regard to the prevalence of obesity. More and more , however, to

global epidemic of obesity contributes to the developing world . Obesity is becoming progressively

problem even in countries where it was previously almost occur. prevalence of obesity

in European countries reaches 10-40 % . [1] Although the countries of Central and Eastern

Europe, together with the Czech Republic ranks to lead European ranking prevalence

Obesity ! The differences in the prevalence of obesity in different countries may be caused

different tendency towards obesity determined genetically , but also

different external conditions . They are mainly energy intake and

energy expenditure .

Obesity along with other metabolic and hemodynamic

abnormalities (type 2 diabetes mellitus , dyslipidemia, hypertension , insulin

resistance -IR) are major components of the metabolic syndrome (MS) , which

a high risk of cardiovascular complications (coronary artery disease

, myocardial infarction , stroke) . In the interpretation of the causes of MS is

emphasized obesity and excessive food intake . However, it appears that low

level of physical fitness physics associated with inactivity , typical for people with insulin resistance , a greater risk for cardiovascular disease than obesity itself .