Insuline resistance was described by Reaven as an early causation of metabolic syndrom. Nowadays many specialists use for this disease term Syndrom of Insuline Resistance. For this illness is typical the postreceptor resistance mainly manifested in muscles, liver and fat tissue. What is the main reason of etiology IR is still the subject of many studies. The fact is, that the epidemy of this disease is closely connected with low physical activity and growth of obesity. Appropriate election of training load affects the basic problem-hyperglycemia (especially postprandial). The absention of motional activity reduces the sensitivity of insuline receptors for the third or half. On the contrary- well used motional activity increase this sensitivity. Dynamic strength training raises the portion of muscles mass and proportional growth of insuline receptors. The best results provides complex therapy which includes physical activity, dietologic intervention and restrict of nourishment.