

GUIDELINES FOR THE USE OF PHYSICAL ACTIVITY IN CHILDREN WITH TYPE I DIABETES

Abstract. Type 1 diabetes is a metabolic disorder whose treatment depends not only on the administration of insulin and diabetic control, but also on properly applied physical activity to improve insulin sensitivity and thus the patient's condition. In order to fulfill this role, physical exercise must be systematic and properly administered. An adequate intensity depends on the physical fitness level of the patient, which may be determined in a six-minute walk test. Before a training cycle, the patient should be subjected to basic clinical tests. The intensity of training may be determined by the Karvonen or Strunz formula to precisely specify the training heart rate (60–75% of maximum heart rate, depending on the condition of the individual). Blood sugar levels should be measured before and after the training session, while during exercise a heart rate monitor should be used. All these measures should help prevent the occurrence of adverse effects such as hypoglycemia.