

Diabetes mellitus (DM) represents a group of chronic and metabolic diseases whose primary characteristic is hyperglycemia (Pelikánová, 2003). According to the definition by the American Diabetes Association (ADA) and the 1997 recommendations (Expert Committee, 1997), this group of metabolic disorders results from a defect in insulin secretion, insulin action, or a combination of both abnormalities. These are accompanied by a complex disturbance in the metabolism of carbohydrates, fats, and proteins.

Over the course of the disease, long-term vascular complications gradually develop, affecting multiple organs—particularly the eyes, kidneys, nerves, heart, and blood vessels. The classification and diagnosis of the diabetic syndrome are based on the detection of hyperglycemia and clinical signs of the disease.