
Metabolism

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Study of metabolic and endocrine diseases involves the genetic, biochemical, molecular, and cellular mechanisms in their development which may be used both in animal models and in human medicine. Inborn errors of metabolism and their early diagnosis and treatment are one of the key pillars in the clinical research. The intensive study is concentrated on the early stages of obesity, nutrition disorders, lipid metabolism and diabetes as well as on the research of adipose tissue and on its regulatory role. A development of widely occurring metabolic diseases supports the studies of the pathogenesis of complications with orientation to the vessel wall impairment and the markers of these changes. The interventions of the metabolic diseases involving the non-pharmacological (nutritional, regimen or surgical interventions) and pharmacological treatments are evaluated with the help of molecular biology and immunology and with the use of markers characterized the oxidative stress and subclinical inflammation. The discoveries have been used as the effective sources for the prevention. The endocrine disorders involve the diagnoses and treatment of the inflammatory and tumor processes of all endocrine organs including the research of their metabolic effects and their influence on gravidity.

Selected outputs

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