

INSULIN RESISTANCE: MOLECULAR MECHANISMS AND SYSTEMIC IMPACT

Alicia Moura Subtil

Julia da Silva Torres Grosse¹ Mariany Carrenho Caetano¹ Sandra Maria Barbalho¹; ². 1. University of Marília; Marília; São Paulo. 2. Hospital Beneficente da UNIMAR; Marília; São Paulo.

RESUMO

Insulin resistance is a disorder characterized by a reduced cellular response to the hormone, resulting from the interaction between genetic factors, lifestyle, and chronic inflammation. This process compromises insulin signaling, reduces glucose uptake, and causes metabolic changes such as hyperglycemia and dyslipidemia. Furthermore, it is associated with the development of chronic diseases, such as type 2 diabetes and cardiovascular diseases, highlighting its central role in systemic metabolic imbalance.

Palavras-chave: Keywords: Insulin Resistance Insulin Signaling Chronic Inflammation Molecular Mechanisms Systemic Complications.