New Insights in Obesity: Genetics and Beyond

Volume - 9, Issue - 1

Research Article **Published Date:- 2025-09-09**

Novel Mutation in Famous Gene Diseases in Red Blood Cells

One of the most important and critical red blood cell disorders is dysfunction and deformation of the membrane structure, which affects the metabolic and biological red blood cell functions. On the other hand, the basic causes of these problems are the genetic mutations in the production of proteins that correlate to the structure and receptors of cells. The diagnosis methods and techniques are the other essential points that focus most scientists on. In this systematic review, the article pointed to the key title, which is the diagnosis of novel genes with different techniques and methods. The result of articles studies that were published in the last decades underlined the types of techniques such as Whole-Exome Sequencing, Quantitative Real-Time PCR, Targeted Next-Generation Sequencing, and Sulphate-Polyacrylamide Gel, which investigated the different membraned gene mutations that are novel and correlated to the genes that make the structures and functions of red blood cells such as hereditary spherocytosis, hereditary elliptocytosis, hereditary pyro poikilocytosis. In addition, the hereditary membrane disorders correlated to others, such as hereditary spherocytosis, have a relationship with vitamin B12, immunodeficiency.

Review Article **Published Date:- 2025-07-24**

A Resurgence of the Idea of Hypertriglyceridemia and Lower Serum (HDL-C) as Predictive Factors for Insulin Resistance (IR) & Type 2 Diabetes Mellitus Development: A Narrative Review

---