Very Low-Density Lipoprotein (VLDL) Cholesterol

Another type of bad cholesterol that primarily carries triglycerides in the blood.

Very low-density lipoproteins (VLDL), along with chylomicrons, low-density lipoproteins (LDL), intermediate-density lipoproteins (IDL), and high-density lipoproteins (HDL), represent the five primary categories of lipoproteins. These lipoproteins are responsible for the transport of hydrophobic lipids, including phospholipids, triglycerides, and cholesterol, within plasma and extracellular fluids. The fundamental components of cellular life include lipids, proteins, carbohydrates, and nucleic acids.[1]

Lipids play a crucial role in the formation of cell membranes, energy storage, intracellular signaling, and the transport of other vital organic compounds, such as vitamins. Lipoproteins facilitate the movement of hydrophobic lipids through the hydrophilic environment of the body's systemic circulation. The liver's synthesis and secretion of VLDL into the bloodstream is a complex and tightly regulated process that is essential for maintaining lipid homeostasis in the body. Recent studies indicate that increased production and secretion of VLDL, or changes in its regulatory mechanisms, can directly lead to the development of multiorgan diseases, including atherosclerosis.[2,3]

References

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