

# Review on Lipid- Based Drug Delivery System to Enhance Bioavailability of Poorly Water Soluble Drugs

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**Abstract:** *The most popular and well acknowledged method of delivering drugs is oral administration. Poorly water soluble medications, however, are shown to have a difficult time achieving sufficient bioavailability when taken orally. Drugs that are poorly soluble in water are still an issue. Among the many creative methods for improving drug bioavailability, the lipid-based drug delivery system is one of the most unique and promising methods. The bioavailability of a lipophilic medicine can be enhanced by altering the makeup of lipid excipients and other additions. The unique mechanism of lipid digestion is involved in lipid-based drug delivery systems; hence, the lipid utilized in the formulation needs to be biodegradable. Furthermore, as compared to free medications, lipid nanoparticles may shield pharmaceuticals from chemical and enzymatic deterioration, improving their medicinal qualities. This review examines various novel delivery systems designed to improve the oral bioavailability of poorly water soluble medicines, with a particular emphasis on the lipid-based drug delivery system, its possible uses, and excipients.*

**Keywords:** lipid- Based Drug Delivery System, Lipid Excipients, Bioavailability, Formulation Techniques, Applications.

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