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Solubility Enhancement of Poorly Water-Soluble Drugs

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Abstract: *This article provides an overview of nanocrystals as a potentially valuable technology for enhancing the solubility of water-insoluble pharmaceuticals. Nanocrystals increase surface area by reducing particle size, hence improving bioavailability and solubility. The authors describe the preparation processes, benefits, and difficulties of employing nanocrystal formulations to overcome the solubility limitations of poorly soluble drugs. The authors examine formulation techniques that help with solubility problems, such as liposomes and self-emulsifying drug delivery systems. These lipid formulations are a useful technique in drug development because they further investigate how they affect drug absorption and bioavailability.*

Keywords: Increase in solubility, bioavailability, and BCS class II medications