

# Role of Antioxidant-Based Herbal Combinations in Preventing Lipid Peroxidation-Induced Liver Damage

**Mani Bhushan Sharma<sup>1</sup> and Dr. Gajanan Surybhan Sanap<sup>2</sup>**

<sup>1</sup>Research Scholar, Department of Pharmacy

<sup>2</sup>Professor, Department of Pharmacy

Sunrise University, Alwar, Rajasthan, India

**Abstract:** *Lipid peroxidation is a key mechanism underlying liver damage in various hepatic disorders, including alcoholic liver disease, non-alcoholic fatty liver disease, and drug-induced hepatotoxicity. Oxidative stress generated by reactive oxygen species damages hepatocyte membranes, leading to cellular dysfunction and apoptosis. Antioxidant-based herbal combinations have emerged as effective hepatoprotective agents by scavenging free radicals, enhancing endogenous antioxidant defense systems, and inhibiting lipid peroxidation. This review summarizes recent research on the formulation, mechanisms, and efficacy of antioxidant-rich herbal blends for liver protection.*

**Keywords:** Antioxidant Herbal Therapy, Hepatoprotection, Lipid Peroxidation