Novel Herbal Drug Delivery Systems: Principles, Applications, and Future Perspectives

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The book *Novel Herbal Drug Delivery Systems: Principles, Applications and Future Perspectives* provides a comprehensive overview of advanced delivery strategies designed to enhance the therapeutic potential of herbal medicines. It emphasizes how modern formulation approaches such as nanoparticles, liposomes, phytosomes, microspheres, and transdermal systems can overcome challenges like poor solubility, limited bioavailability, and instability of plant-derived compounds. The text bridges traditional herbal wisdom with cutting-edge pharmaceutical technology, making it valuable for researchers and industry professionals. It explores regulatory aspects, safety evaluation, and quality control of novel herbal formulations. Case studies and recent advancements are included to demonstrate real-world applications in various diseases. The book highlights the importance of controlled and targeted delivery for maximizing efficacy while minimizing side effects. It also covers scalable manufacturing techniques and commercialization prospects. Emerging trends like nanotechnology, 3D printing, and personalized phytomedicine are discussed in depth. Overall, this book serves as a key reference for students, academicians, and pharmaceutical scientists working in natural product drug development.

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