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One continuous process of agglomeration and microencapsulation for enoxacin. Preparation method and mechanism of microencapsulation.

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A novel microencapsulation method was developed by using the wet spherical agglomeration (WSA) technique. Spherical agglomerates containing enoxacin (ENX) or lactose were prepared in the acetone-n-hexane-ammonia water (or distilled water) solvent system, and were microencapsulated continuously with the aminoalkylmethacrylate copolymer (Eudragit RS). Microencapsulation was performed with a modified organic phase separation by the non-solvent addition method. By selecting proper composition ratio of acetone and n-hexane, the WSA solvent system turned to a non-solvent for a wall material, i.e. Eudragit RS. Dichloromethane was used as a good solvent because it did not affect the characteristics of spherical agglomerates prepared in the WSA system.

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The Transport Mechanism of an Organic Cation, Disopyramide, by Brush-Border Membranes. Comparison Between Renal Cortex and Small Intestine of the Rat.

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The characteristics of disopyramide uptake in brush-border membrane vesicles isolated from rat renal cortex and small intestine were investigated. Transport of disopyramide into an osmotically reactive intravesicular space was observed with notable binding to the membrane surface. An outwardly directed H+ gradient stimulated disopyramide uptake, resulting in a transient uphill transport in both brush-border membranes.

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Drug Release from the Water-in-Oil-in-Water Multiple Emulsion *in Vitro*. II. Effects of the Addition of Hydrophilic Surfactants to the Internal Aqueous Compartment on the Release Rate of Secretin.

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For the application of water-in-oil-in-water (w/o/w) emulsions to a nasal dosage form of secretin, permeation tests were conducted *in vitro* to assess the effects of hydrophilic surfactants in the internal aqueous compartment on the release rate of secretin. The amount of secretin that permeated through an artificial membrane from a donor cell to a receptor cell was affected by the addition of sodium chloride or sodium alkylsulfonate to the internal aqueous compartment of w/o/w emulsions in the donor cell.