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Drug Delivery; 2.1 Introduction; 2.2 Anatomy of the Eye; 2.2.1 Outer Membranes; Conjunctiva, Cornea and Sclera  
2.2.2 Aqueous Chamber, Lens and Vitreous Body  
2.2.3 Choroid and Retina; 2.3 Introduction to Ocular Mucosa; 2.4 The Role of Ocular Mucosa in Drug Delivery; 2.5 Models for Ocular Drug Delivery; 2.6 Recent Advances in Topical Ocular Drug Delivery; 2.6.1 Improving Corneal Retention; 2.6.2 Other Topical Drug Delivery Options; 2.7 Conclusions; References; 3 Drug Delivery Across the Nasal Mucosa; 3.1 Introduction; 3.2 Drug Delivery via the Nasal Mucosa; 3.2.1 Drugs Administered for Local Action; 3.2.2 Drugs Administered for Systemic Effect; 3.2.3 Peptide and Protein Delivery  
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3.3.1 Structure and Function of the Nasal Cavity; 3.3.2 Nasal Epithelia; 3.3.3 Airflow; 3.3.4 Nasal Secretions; 3.3.5 Mucociliary Clearance; 3.4 Disease States of the Nasal Cavity; 3.4.1 Disease States Altering Drug Absorption; 3.5 Transport Across the Membrane; 3.5.1 Transport Across the Nasal Membrane; 3.5.2 The Solute Carrier Family; 3.5.3 Other Nasal Mucosa Transporters; 3.5.4 Efflux; 3.5.5 Paracellular Transport; 3.6 Nose-to-Brain Drug Delivery; 3.7 Conclusion; References; 4 Gastrointestinal Mucosa and Mucus; 4.1 Introduction  
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4.2 The Gastrointestinal Mucus; 4.2.1 What is Mucus?; 4.2.2 Mucus Composition; 4.2.3 Anatomy of Goblet Cells and Mucin Biosynthesis; 4.2.4 Regulation of Mucus Secretion; 4.2.5 Mucus Functions; 4.2.6 Mucus Layer Structure: The Double-Layer Architecture; 4.2.7 Mucus Thickness; 4.2.8 Mucus Rheology; 4.2.9 Mucus Turnover; 4.2.10 Mucus and Ageing; 4.2.11 Mucus and Gastrointestinal Disease; 4.3 Conclusions; References; 5 Vaginal Mucosa and Drug Delivery; 5.1 Introduction; 5.2 Drug Delivery and the Human Vagina  
5.2.1 Anatomical and Physiological Considerations

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## Sommario/riassunto

Mucoadhesion defined as attachment of synthetic or natural materials to mucosal tissues has been widely exploited in pharmaceutical forms. This multi-author book provides an up-to-date account of current research on mucoadhesive materials and drug delivery systems. The introductory section describes the structure and physiology of various mucosal surfaces (oral, nasal, ocular, gastrointestinal and vaginal mucosa). This is followed by chapters on the various methods used to study mucoadhesion and to characterise mucoadhesive properties of various dosage forms

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