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Animal Models; V. Statistics; Suggested Reading; Chapter 3. Synthesis, Metabolism, and Actions of Bioregulators; I. Amino Acids, Amines, Peptides, and Proteins; A. Catecholamines; B. Indoleamines; C. Peptides; D. Receptors for Amine and Peptide Bioregulators; E. The Second Messenger Concept; F. Turning Off the Response to Bioregulators; G. Effects of Membrane-Bound Bioregulators on Nuclear Transcription; II. Steroid Bioregulators; A. Steroid Structure and Nomenclature; B. Steroid Synthesis  
C. Transport of Steroid Hormones in Blood  
D. Mechanisms of Steroid Action; E. Reproductive Steroid Action; F. Membrane Receptors for Steroids; G. Metabolism and Excretion of Steroid Hormones; III. Thyroid Hormones; A. Structure and Synthesis of Thyroid Hormones; B. Transport of Thyroid Hormones in the Blood; C. Mechanism of Thyroid Hormone Action; D. Metabolism of Thyroid Hormones; IV. Eicosanoids; A. Chemical Structure of Eicosanoids; B. Biosynthesis and Actions of Eicosanoids; V. Other Important Bioregulators; A. Acetylcholine; B. Gamma-Aminobutyric Acid (GABA); C. Interleukins  
D. Miscellaneous Brain Neuropeptides  
E. Gaseous Bioregulators; VI. Summary; Suggested Reading; Chapter 4. Organization of the Mammalian Hypothalamus-Pituitary Axes; I. The Mammalian Pituitary; A. Subdivisions of the Adenohypophysis; B. Cellular Types of the Adenohypophysis; C. Subdivisions of the Neurohypophysis; II. The Mammalian Hypothalamus; A. Sexual Differences in the Hypothalamus; B. Hypothalamic-Releasing Hormones; C. Control of Hypothalamic Hormone Release; D. Paracrine Factors in the Adenohypophysis; III. Tropic Hormones of the Adenohypophysis; A. Category I Tropic Hormones  
B. Category II Tropic Hormones

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### Sommario/riassunto

One of the only books to discuss all vertebrates, the fourth edition of Vertebrate Endocrinology has been completely reorganized and updated to explore the intricate mechanisms that control human physiology and behavior as well as that of other vertebrate animals. Perfect for students in endocrinology, zoology, biology and physiology, it allows readers to gain both an understanding of the intricate relationships among all of the body systems and their regulation by hormones and other bioregulators, but also a sense of their development through evolutionary time as well as the roles of h

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