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Mechanisms of Hormone Action; Chapter 3 Functional Development of the Mammary Gland; Onset of Milk Secretion; Lactogenesis; Cellular Differentiation; Cell-Cell Interactions; Role of Milk Removal in Milk Secretion; Milk Component Biosynthesis; Structure and Function at the Secretory Cell Level; Pathways for Protein and Lactose Secretion; Pathways for Lipid Secretion; Secretion of Other Milk Constituents; Chapter 4 Milk Component Biosynthesis

Metabolic Pathways and Precursors for Milk Biosynthesis Glycolysis, Gluconeogenesis, Krebs Cycle, and Energy Requirements; Lactose Biosynthesis; Milk Fat Biosynthesis; Milk Protein Biosynthesis; Biotechnologies and the Mammary Gland; Chapter 5 Milking Management; Physiological Factors and Machine Milking; Teat Structure; Teat Opening, Teat Canal, and Teat End; Milking Machine Components; Machine Milking and Mastitis Control; Monitoring Udder Health; Chapter 6 Endocrine, Growth Factor, and Neural Regulation of Mammary Development; Steroid Hormones and Mammogenesis; Steroids and Pregnancy

Anterior Pituitary Hormones and Mammogenesis Other Hormones and Mammogenesis; Local Tissue Mediators of Endocrine Action in Mammogenesis; The Insulin-like Growth Factors Axis; Epidermal Growth Factor Family; Fibroblast Growth Factors; Transforming Growth Factor -; Hepatocyte Growth Factor; Parathyroid Hormone-Related Peptide; Other Stroma-Derived Growth Regulators; Chapter 7

Endocrine, Growth Factor, and Neural Regulation of Mammary Function; Endocrine Regulation of Lactogenesis; Periparturient Endocrine Profiles; Essential Roles of Prl, Glucocorticoids, and Progesterone
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