

Module 1

Anatomy, Physiology & Endocrinology of Lactation: A Guide to Breastfeeding Fundamentals

Course Aims:

1. Structural Components and Development of the Lactating Breast:

- Understand the major structural components of the lactating breast and how it evolves into a milk-producing organ.
- Explore the terminology used in the anatomy of the breast, enhancing communication and understanding.

2. Breast Functioning and Lactation

- Grasp the functioning of the lactating breast, including the synthesis and composition of breastmilk.
- Gain insight into the stages of Lactogenesis and the different hormones responsible for lactation initiation and maintenance.

3. Endocrine and Autocrine Influences on Lactation

- Discover how lactation is influenced by the endocrine and autocrine systems, and the roles of various hormones.

4. Infant Oral Anatomy and Sucking Physiology

- Explore the oral anatomy of newborns and the physiology behind infant sucking.

Course Objectives:

Upon completing this course, participants will be able to:

1. Discuss the major parenchymal and stromal structures of the lactating breast, fostering a deep understanding of breast anatomy.
2. Navigate and employ the terminology used in breast anatomy discussions for effective communication.
3. Understand the roles of hormones involved in breast development across the lifespan, and their influence on breast changes.

4. Explain the initiation and maintenance of lactogenesis, as well as the roles of key hormones throughout lactation phases.
5. Comprehend the supply and demand mechanism driving milk production and infant feeding.
6. Describe the cellular processes occurring during Lactogenesis and letdown, unveiling the intricacies of milk ejection.
7. Discuss variations in the let-down reflex and their potential impact on the breastfeeding relationship.
8. Provide guidance on managing breastfeeding in cases of inverted or flat nipples, promoting successful breastfeeding experiences.
9. Describe essential features of newborn oral anatomy, supporting a holistic understanding of infant feeding.
10. Engage in insightful discussions about the intricate suck cycle of newborns, fostering a grasp of infant sucking physiology.