Breastfeeding

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Breastfeeding is the process of feeding babies with milk from a woman’s breast. Breastfeeding is highly recommended by healthcare professionals because of its immense benefits. It protects a child against allergies and reduces the occurrence of stomach upsets. It also reduces the risks of a child getting viruses, gastroenteritis, respiratory, and urinary tract infections.

Lactation is a process that can be termed as the milk secretion from the mammary glands and also the period that a mother feeds her child. The process of lactation occurs in all post-pregnancy female mammals. In humans, the milk comes from the mother’s nipples. Galactopoiesis can be defined as the process of maintenance of production of milk. In pregnancy, a woman's body goes through multiple changes. In the eighteenth week of pregnancy, the body of a woman starts producing hormones responsible for stimulating the growth of milk duct system present in the breast. The hormone progesterone impacts growth in the size of alveoli and lobes while estrogen stimulates the growth of milk duct. Prolactin contributes not only to increasing growth and alveoli differentiation but also impacts the ductal structures differentiation (Pang & Hartmann, 2007).

During the latter part of pregnancy, the breast of a pregnant woman enters into a stage called the secretory differentiation stage. At this stage, the breast makes colostrum that is a thick yellowish fluid. The high level of progesterone inhibits milk production at this stage. The level of prolactin remains high at birth while placenta delivery decreases the HPL levels along with estrogen and progesterone. This sudden reduction of progesterone results in stimulating the copious milk production of secretory activation. After breast stimulation, the level of prolactin in the blood rises and then returns to the pro-breastfeeding stage. The release of prolactin is responsible for triggering the cells in alveoli to produce milk. The first milk that the baby receives after birth is colostrum that contains a higher amount of white blood cells and antibiotics as compared to mature milk (Kulski & Hartmann, 1981).

While discussing the let-down reflex process, the baby triggers the nerves in the nipple after sucking the breast. The nerve causes the release of hormones in the blood. Cells present around the alveoli squeeze out the milk and push it down the ducts towards the nipple. The let-down reflex is responsible for making the milk available to the baby.

**References**

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