## **Ovarian and Uterine Cycles**

Days 0-5: FSH from the pituitary gland causes increasing levels of estrogen to be released from the ovaries.

- In the ovaries:
  - Several eggs begin maturing under the influence of estrogen.
- In the uterus:
  - Menstrual Phase: The endometrium (capillary-rich epithelial lining) is sloughed off

Days 6-14: FSH from the pituitary gland causes rapidly increasing levels of estrogen to be released from the ovaries. Estrogen is the dominant hormone during this phase.

- In the ovaries:
  - Several eggs continue maturing
- In the uterus:
  - The endometrium begins thickening again, under the influence of estrogen
  - If intercourse happens in 4-5 days preceding ovulation, semen may remain at the bottom of the uterus and sperm can potentially still be viable when ovulation does occur around day 14.
- In the brain:
- Estrogen helps women feel more confident and sexually interested as ovulation approaches **Day 14: Ovulation occurs** under the influence of a spike in LH. One (or sometimes two or three) eggs are ovulated from the ovary and make their way down the uterine tubes to the uterus. They may be fertilized if intercourse occurred in any of the 4-5 days leading up to ovulation, and within 24 hours after ovulation. So, there is an approximate 6 day window of fertility days each month.

## Day 15-21: Progesterone is the dominant hormone during this phase.

- In the ovaries:
  - Cells left behind when the egg was ovulated release progesterone. These cells are yellowish and thus referred to as the "corpus luteum".
- In the uterus:
  - The endometrium continues thickening under the influence of estrogen and, now, also progesterone. It should be thick and velvety by Day 21, when the egg may arrive.
- In the brain:
  - Physically, emotionally, and sexually, this is the best time of the month for most women. High levels
    of estrogen are the cause of these good feelings.

## Day 21-28: Estrogen and Progesterone levels fall rapidly

- In the ovaries:
  - If fertilization hasn't occurred, the egg passes out of the body. The ovaries stop producing progesterone. Estrogen levels continue to fall.
- In the uterus:
  - Falling levels of estrogen cause the loss of the endometrial lining in a process known as menses.
- In the brain:
  - Falling levels of estrogen mean that this pre-menstrual time is the most psychologically challenging part of the month for many women.