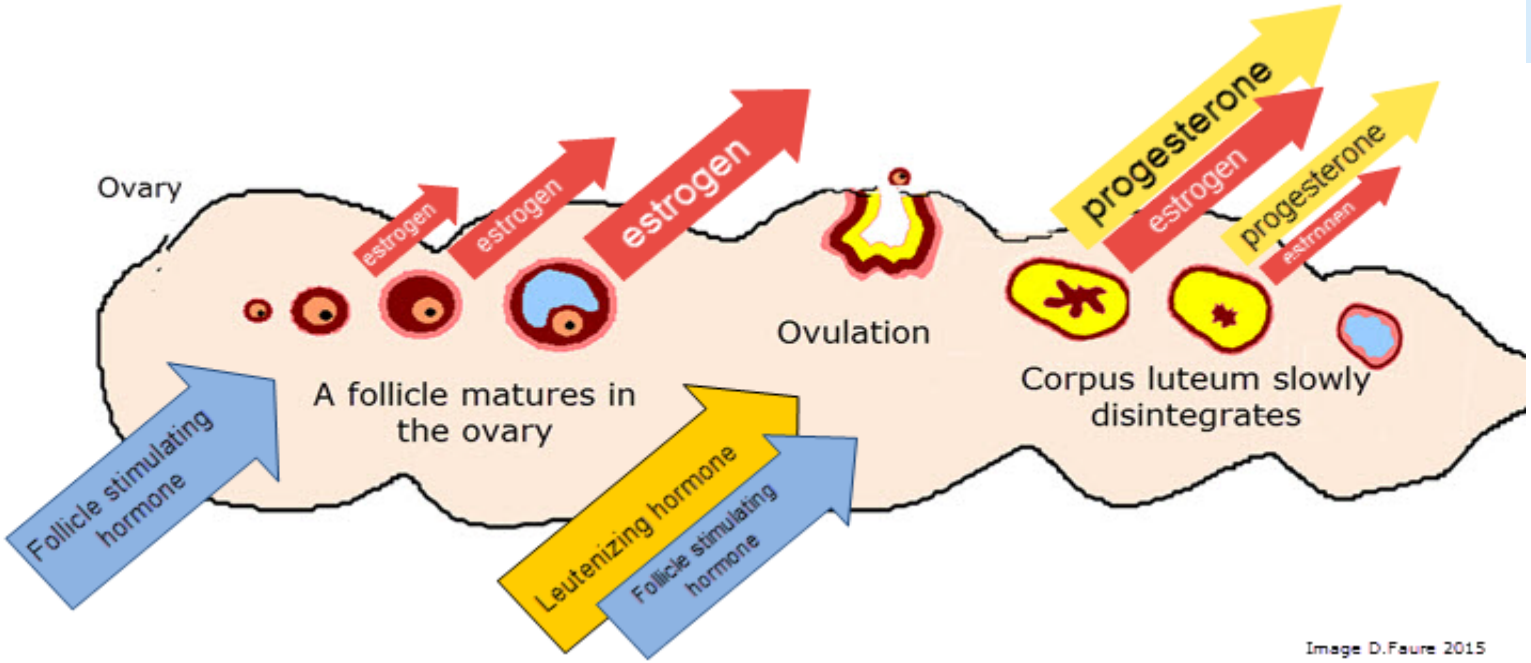
Feedback in hormones



Negative feedback

Explained simply: Negative feedback

Is a control process where the response to a stimulus **reduces** that stimulus.

LH is produced by pituitary (stimulus)

promotes the formation of the corpus luteum

the corpus luteum then produces progesterone (response)

The progesterone Inhibits LH secretion

Menstrual cycle hormones

Hormone	Description
FSH	Made by the pituitary gland Promotes the development of follicles in the ovary Promotes estrogen secretion by the follicle cells
LH	Made in the pituitary gland Promotes ovulation & the formation of the corpus luteum Promotes estrogen secretion by the developing follicle
estrogen	Made by developing follicle and corpus luteum in the ovary Promotes thickening of the uterus lining Inhibits secretion of FSH Stimulates pituitary to secrete LH
progesterone	Made by the corpus luteum Maintains the thickened uterus lining Inhibits secretion of LH & FSH

Positive feedback

Explained simply: Positive feedback

Is a control process where the response to a stimulus **increases** that stimulus.

LH is produced by the pituitary gland.

LH causes follicle cells to make estrogen.

Estrogen promotes production of LH.

LH produced increases.

This LH production continues to increase until ovulation – then follicle cells become the corpus luteum and make progesterone which inhibits LH production.

Positive and negative feedback