*This is the **Higher Combined** version — includes Higher Tier content. Some Separate-only details are omitted.*

The menstrual cycle is controlled by four hormones working together in a coordinated feedback system.

• FSH (follicle-stimulating hormone): produced by pituitary. Stimulates egg maturation in ovary. Stimulates oestrogen production.

• Oestrogen: produced by ovary. Repairs and thickens the uterus lining. At high levels, inhibits FSH production (negative feedback). Stimulates LH release (positive feedback at peak).

• LH (luteinising hormone): produced by pituitary. Surge on day ~14 triggers OVULATION (release of egg from ovary).

• Progesterone: produced by corpus luteum (remains of follicle after ovulation). Maintains uterus lining. If no fertilisation, corpus luteum breaks down → progesterone falls → menstruation → cycle restarts.

• Cycle length: ~28 days. Day 1 = first day of menstruation.

• Menstruation: uterus lining breaks down and is shed (days 1–5 typically).

★ **HT** The interplay: FSH stimulates oestrogen → high oestrogen triggers LH → LH triggers ovulation → progesterone maintains lining → if no pregnancy, progesterone falls → new cycle begins.

### Key Terms

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| **FSH** | Follicle-stimulating hormone — from pituitary — stimulates egg maturation and oestrogen production |
| **LH** | Luteinising hormone — from pituitary — surge triggers ovulation (egg release) |
| **Oestrogen** | Ovarian hormone — repairs uterus lining, triggers LH surge, inhibits FSH at high levels |
| **Progesterone** | Hormone from corpus luteum — maintains uterus lining after ovulation |
| **Corpus luteum** | The structure remaining after ovulation — produces progesterone |
| **Ovulation** | Release of a mature egg from the ovary — triggered by LH surge (~day 14) |

■ **Exam Tip:** Learn the SEQUENCE: FSH → oestrogen rises → LH surge → ovulation → progesterone rises (maintains lining) → if no pregnancy, progesterone falls → menstruation. In exams, you may be given a hormone graph and asked to link it to events in the cycle.