

16.5 Sex hormones in humans

Name: _____ Class: _____ Date: _____

Total: 6 marks

Objective

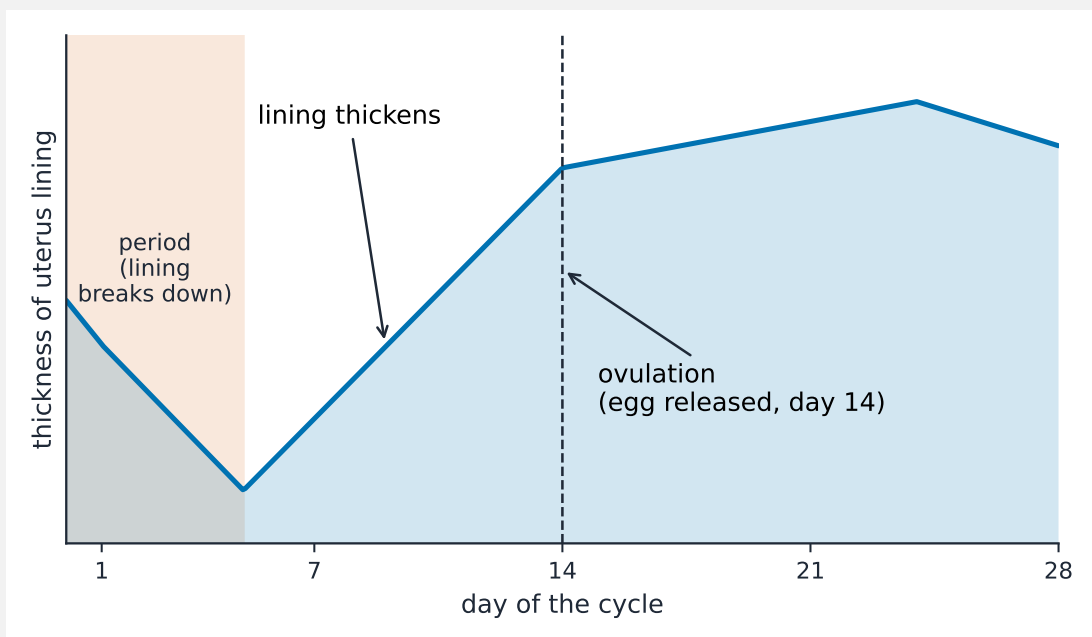
Build the skills to answer exam questions on **sex hormones in humans** 人类性激素—**puberty** 青春期, secondary sexual characteristics, and the **menstrual cycle** 月经周期.

You must be able to:

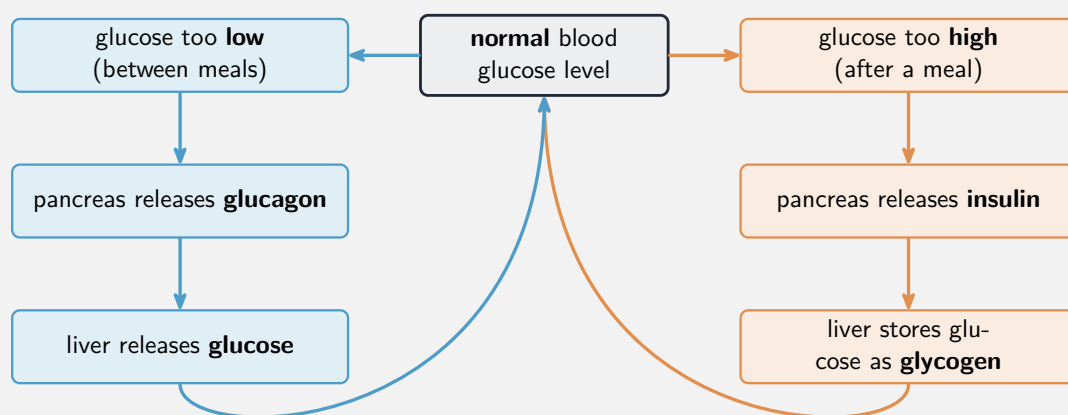
- state the roles of testosterone and oestrogen at puberty
- describe the events of the menstrual cycle
- name the hormones that control the cycle (FSH, LH, oestrogen, progesterone)

1 Worked examples

■ The menstrual cycle



Lining thickens → ovulation (day 14) → a period follows if there is no fertilisation



Sex hormones are controlled by negative feedback

- **testosterone** (boys) and **oestrogen** (girls) cause secondary sexual characteristics.
- hormones: FSH (egg matures), LH (ovulation), oestrogen (thickens lining), progesterone (maintains lining).

2 Practice

2.1 Name the hormone responsible for female secondary sexual characteristics. [1]

2.2 State on which day of a 28-day cycle ovulation usually occurs. [1]

3 Exam-style questions

3.1 Ovulation is the: [1]

- **A** thickening of the uterus lining
- **B** release of an egg from the ovary
- **C** breakdown of the lining
- **D** fusion of gametes

3.2 The menstrual cycle prepares the uterus for pregnancy.

(a) Describe what happens to the uterus lining if the egg is not fertilised. [2]

(b) Name the hormone that triggers ovulation.

[1]

4 Go further

You are now ready for the real exam questions on this subtopic. Open the **16.5 Sex hormones in humans** past-paper sheet in the Library, or try these in **Practice mode**:

- 0610/21 N25 —Q25 (menstrual cycle)
- 0610/21 N25 —Q26 (sex hormones)

Solutions

2.1 oestrogen.

2.2 about day 14.

3.1 B. Ovulation is the release of an egg from the ovary.

3.2 (a) the lining breaks down and leaves the body as a period.
(b) LH.