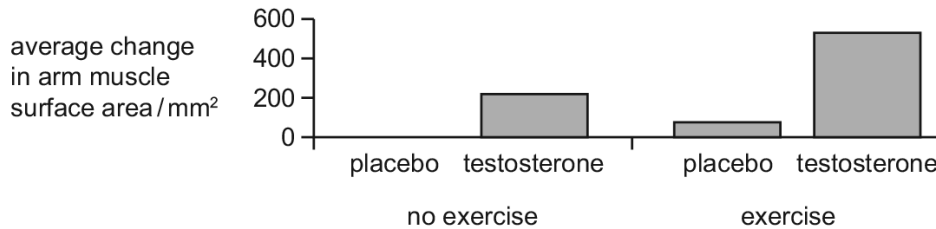


16.5 Sex hormones in humans

01. 0610_m22_qp_22 Q: 28

A study investigated the effect on arm muscle surface area of taking testosterone and doing exercise. The participants in the study were given either testosterone or a placebo. The placebo does not contain any testosterone.

The bar chart shows the results of the study.



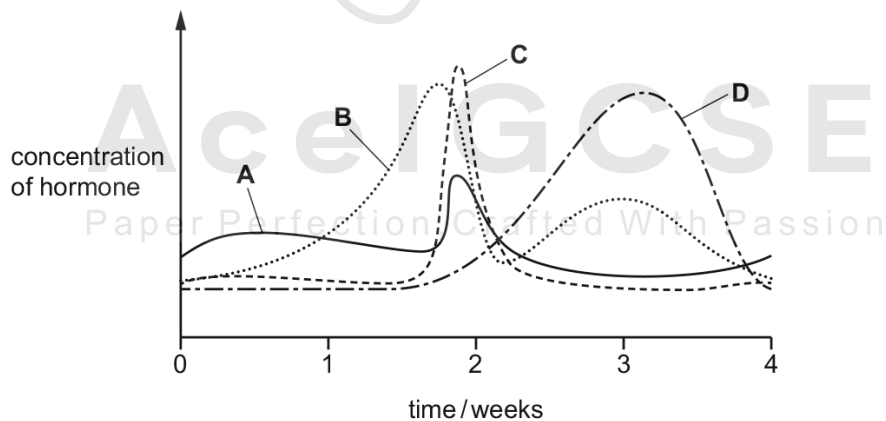
Which conclusion about the data in the graph is correct?

- A Exercise has **no** effect on arm muscle surface area.
- B No exercise and **not** taking testosterone has the greatest effect on arm muscle surface area.
- C Exercise has the same effect on arm muscle surface area as **no** exercise.
- D Taking testosterone increases arm muscle surface area.

02. 0610_m22_qp_22 Q: 31

The graph shows the four hormones that control the menstrual cycle.

Which curve on the graph represents the hormone LH?



03. 0610_w21_qp_21 Q: 29

Which hormone stimulates the release of an egg from the ovary during the menstrual cycle?

- A FSH
- B LH
- C oestrogen
- D progesterone

04. 0610_p20_qp_20 Q: 27

The diagram shows the menstrual cycle of a woman during the month of September.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

key



= ovulation



= menstruation

Why can fertilisation not take place if sperms are released into the vagina on 8th September?

- A Sperms are washed out of the female uterus by the menstrual flow.
- B Sperms can survive in the female reproductive system for only 3 or 4 days.
- C Sperms must be released after ovulation for fertilisation to take place.
- D The uterus lining is washed out of the female body during menstruation.

16.5. SEX HORMONES IN HUMANS

05. 0610_p20_qp_20 Q: 28

Which states a function of the four hormones FSH, LH, progesterone and oestrogen in controlling the menstrual cycle?

	FSH	LH	progesterone	oestrogen
A	stimulates the pituitary gland to release LH	maintains the lining of the uterus during the middle part of the menstrual cycle	causes an egg to mature in an ovary	causes the mature egg to be released from the ovary
B	causes an egg to mature in an ovary	causes the mature egg to be released from the ovary	prepares the uterus to receive a fertilised ovum	stimulates the pituitary gland to release LH
C	prepares the uterus to receive a fertilised ovum	stimulates the ovaries to release oestrogen	stops FSH being produced	maintains the lining of the uterus during the middle part of the menstrual cycle
D	maintains the lining of the uterus during the middle part of the menstrual cycle	stops FSH being produced	causes the mature egg to be released from the ovary	prepares the uterus to receive a fertilised ovum

06. 0610_w20_qp_22 Q: 29

Which hormone causes the lining of the uterus to become thick and glandular before ovulation?

- A** adrenaline
- B** FSH
- C** oestrogen
- D** progesterone

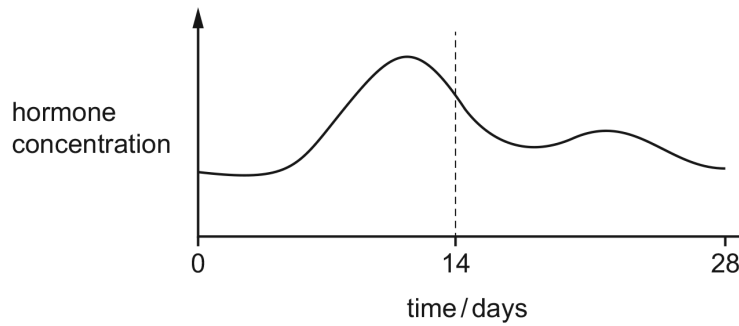
07. 0610_w20_qp_23 Q: 28

Which organ secretes progesterone?

- A** ovary
- B** pancreas
- C** salivary gland
- D** testis

08. 0610_m19_qp_22 Q: 30

The graph shows a hormone that is involved in controlling the menstrual cycle.



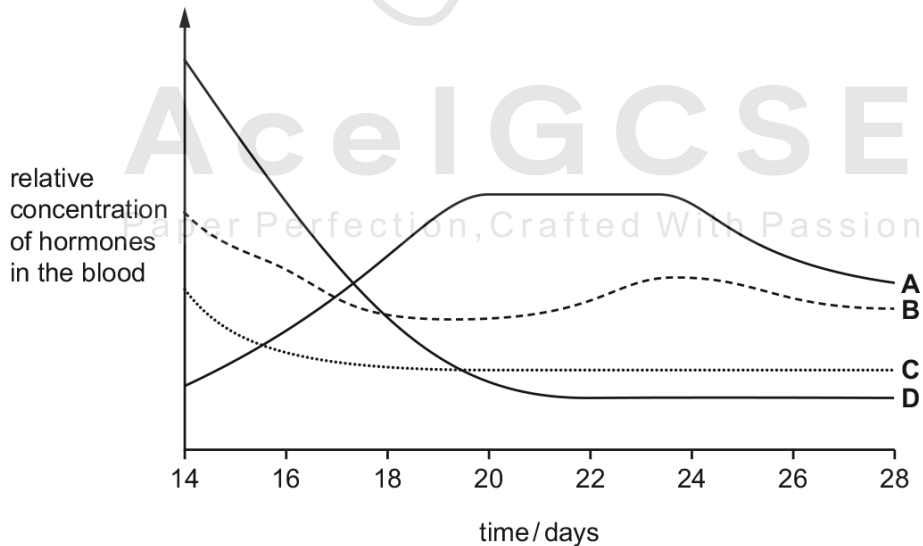
What is the hormone?

- A FSH
- B LH
- C oestrogen
- D progesterone

09. 0610_s19_qp_22 Q: 31

The graph shows the relative concentration of hormones in the blood during days 14–28 of the menstrual cycle.

Which letter represents the hormone progesterone in a woman who is not pregnant?



16.5. SEX HORMONES IN HUMANS

10. 0610_s19_qp_23 Q: 29

Where is progesterone produced?

- A ovary
 - B pituitary gland
 - C prostate gland
 - D uterus
-

11. 0610_w19_qp_21 Q: 28

Which statement about the hormone FSH is correct?

- A It stimulates ovulation.
 - B It stimulates ovulation and menstruation.
 - C It stimulates the maturation of follicles.
 - D It stimulates the maturation of follicles and menstruation.
-

12. 0610_w19_qp_22 Q: 29

There are many reasons why a woman does not become pregnant.

What can be treated by a drug that increases the secretion of FSH?

- A inactive sperm
 - B follicles not developing
 - C thin uterine lining
 - D too few sperm
-

13. 0610_w19_qp_23 Q: 28

The concentrations of LH and oestrogen are measured during part of a menstrual cycle.

On which day does ovulation occur?

	day from start of menstrual cycle	concentration of LH / arbitrary units	concentration of oestrogen / arbitrary units
A	7	10	30
B	10	12	135
C	13	120	130
D	16	20	25

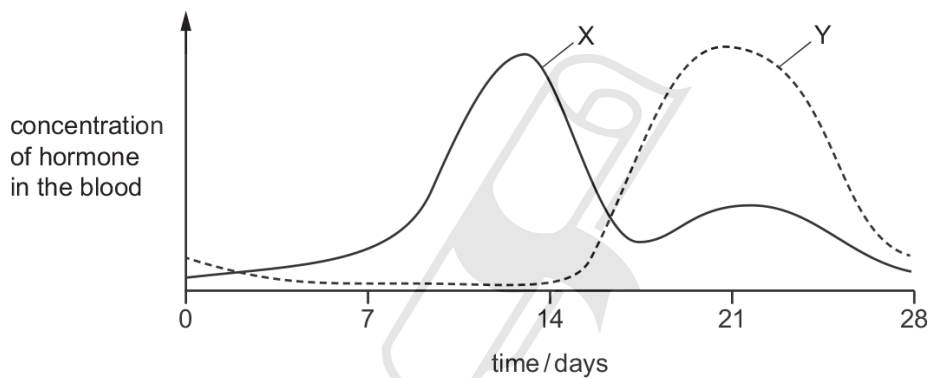
14. 0610_w19_qp_23 Q: 29

Where are oestrogen and progesterone produced during the menstrual cycle in a woman who is **not** pregnant?

	oestrogen	progesterone
A	adrenal gland	ovary
B	ovary	ovary
C	ovary	placenta
D	placenta	pancreas

15. 0610_s18_qp_22 Q: 30

Two hormones, X and Y, are secreted by the ovaries. The graph shows the concentrations of these hormones in the blood during one complete menstrual cycle.



What are hormones X and Y?

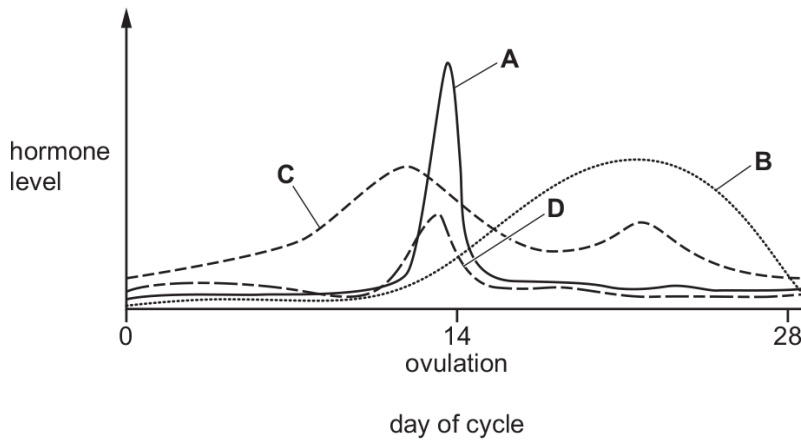
	hormone X	hormone Y
A	FSH	LH
B	LH	FSH
C	oestrogen	progesterone
D	progesterone	oestrogen

16.5. SEX HORMONES IN HUMANS

16. 0610_s18_qp_23 Q: 29

The graph shows the concentration of four hormones during the menstrual cycle.

Which line represents progesterone?



17. 0610_w18_qp_22 Q: 28

Which hormone maintains the thickness of the lining of the uterus during pregnancy?

- A follicle stimulating hormone (FSH)
- B luteinising hormone (LH)
- C oestrogen
- D progesterone

18. 0610_w18_qp_23 Q: 28

The diagram shows a woman's menstrual cycle.



On which day does ovulation occur, and on which day could fertilisation occur?

	ovulation	fertilisation
A	P	R
B	P	S
C	Q	R
D	Q	S

19. 0610_s17_qp_21 Q: 29

Which hormone is produced by cells in the placenta of a developing fetus?

- A FSH
 - B LH
 - C testosterone
 - D progesterone
-

20. 0610_m16_qp_22 Q: 30

Which hormone maintains the lining of the uterus during pregnancy?

- A FSH
 - B oestrogen
 - C progesterone
 - D testosterone
-

21. 0610_s16_qp_22 Q: 29

Where are oestrogen and progesterone produced during the menstrual cycle?

	oestrogen	progesterone
A	hypothalamus	ovary
B	ovary	ovary
C	ovary	placenta
D	placenta	pituitary gland

22. 0610_s16_qp_23 Q: 29

The concentrations of LH and oestrogen are measured during part of a menstrual cycle.

On which day does ovulation occur?

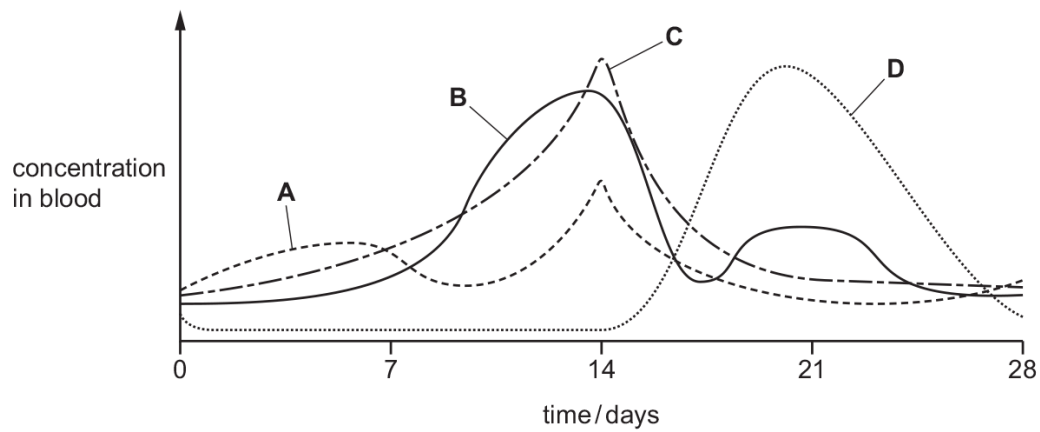
	date	concentration of LH/arbitrary units	concentration of oestrogen/arbitrary units
A	March 25 th	10	30
B	March 28 th	12	135
C	March 31 st	120	130
D	April 3 rd	20	25

16.5. SEX HORMONES IN HUMANS

23. 0610_w16_qp_21 Q: 30

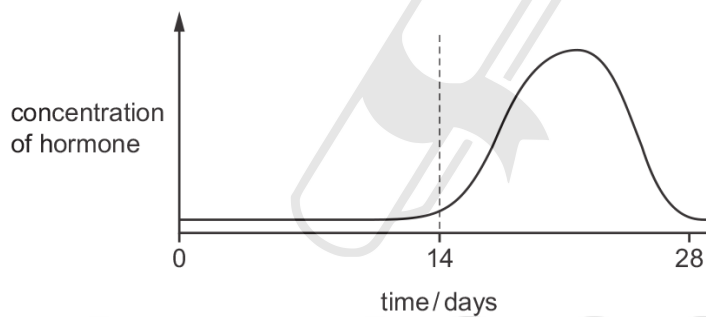
The graph shows changes in the concentrations of four hormones during the menstrual cycle.

Which hormone is progesterone?



24. 0610_w16_qp_22 Q: 31

The graph shows a hormone that is involved in controlling the human female menstrual cycle.

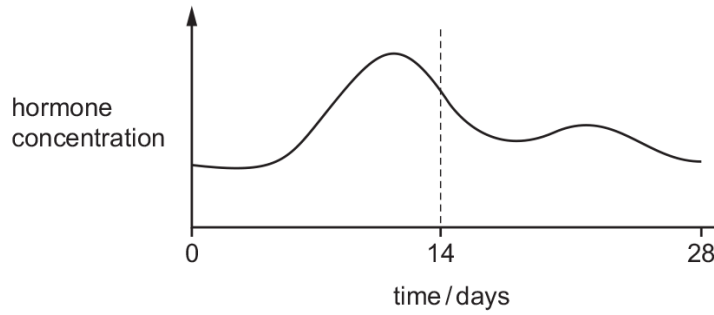


Which hormone is shown by the curve?

- A FSH
- B LH
- C oestrogen
- D progesterone

25. 0610_w16_qp_23 Q: 30

The graph shows a hormone that is involved in controlling the menstrual cycle.



What is the hormone?

- A FSH
- B LH
- C oestrogen
- D progesterone



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SN	Paper	Q. No.	Answer
01	0610_m22_qp_22	28	D
02	0610_m22_qp_22	31	C
03	0610_w21_qp_21	29	B
04	0610_p20_qp_20	27	B
05	0610_p20_qp_20	28	B
06	0610_w20_qp_22	29	C
07	0610_w20_qp_23	28	A
08	0610_m19_qp_22	30	C
09	0610_s19_qp_22	31	A
10	0610_s19_qp_23	29	A
11	0610_w19_qp_21	28	C
12	0610_w19_qp_22	29	B
13	0610_w19_qp_23	28	C
14	0610_w19_qp_23	29	B
15	0610_s18_qp_22	30	C
16	0610_s18_qp_23	29	B
17	0610_w18_qp_22	28	D
18	0610_w18_qp_23	28	C
19	0610_s17_qp_21	29	D
20	0610_m16_qp_22	30	C
21	0610_s16_qp_22	29	B
22	0610_s16_qp_23	29	C
23	0610_w16_qp_21	30	D
24	0610_w16_qp_22	31	D
25	0610_w16_qp_23	30	C



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