

The Menstrual Cycle



This activity will help you to:

- Understand and recall the processes that regulate the menstrual cycle
- Describe and comment on research into the menstrual cycle
- Outline the roles of pacemakers and zeitgebers in the menstrual cycle

The Hypothalamus and Pituitary Gland



Hypothalamus

(label it and outline what it does)

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Pituitary Gland

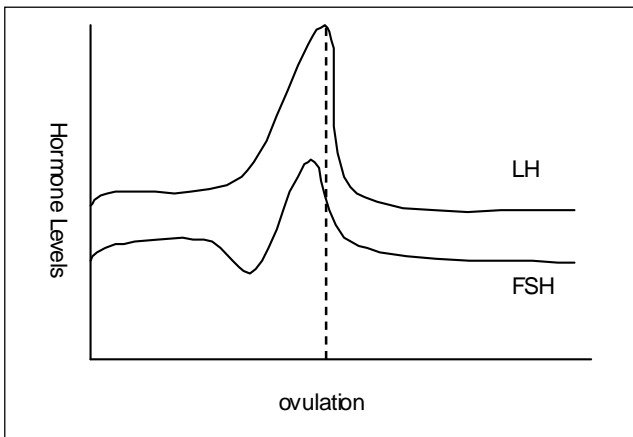
(label it and outline what it does)

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Follicle Stimulating Hormone (FSH) and Leutinising Hormone (LH)



This graph shows the fluctuations of FSH and LH over the menstrual cycle. Write a few sentences explaining what the graph shows.

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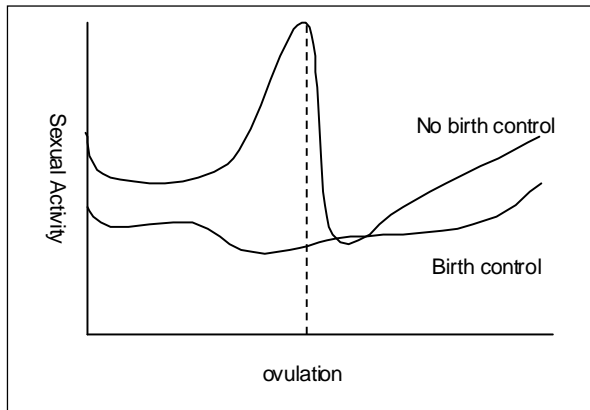
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The Menstrual Cycle and Sexual Behaviour



Adams et al (1978) compared sexual behaviour in women who were taking birth control pills and those who were not. The women recorded their own self-initiated sexual activity every day over a period of one month. They also recorded when they menstruated. The graph on the left summarises Adams et al's results.

Briefly describe the results obtained by Adams et al.

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How might we account for the differences between the two groups of women?

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Zeitgebers and the Menstrual Cycle

McClintock and Stern (1998) conducted a study to see if there are external influences regulating the menstrual cycle. They got a number of women who either were about to ovulate or had just ovulated to wear a pad under their arm to absorb their sweat. These were then given to other women to sniff. The menstrual cycles of these women were monitored to see if there was any effect. McClintock and Stern found that when the pps inhaled the secretions from women who were about to ovulate, their menstrual cycles became shorter. However, when they inhaled secretions from women who had just ovulated, their cycles became longer.

1. What do these results suggest about the role of zeitgebers in the menstrual cycle?
2. Can you suggest a possible mechanism by which this finding might be explained?
3. One consequence of this process could be that when women live in close proximity their menstrual cycles synchronise. From an evolutionary point of view, what would be the advantage in this?