[](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&uact=8&ved=0CAcQjRw&url=http://www.easyfundraising.org.uk/causes/stninianshigh/&ei=FUo-Vc-cLoTyUJizgVg&bvm=bv.91665533,d.d2s&psig=AFQjCNEa08WlCtOW9WaJdemFWEmqt2bMNA&ust=1430231952650835)

**Higher Human Biology**

**Physiology and Health: Gamete production, fertilisation and hormonal control (Key Area 2.1 & 2.2)**

By the end of this topic I will be able to:

**Key area 1: Gamete production and fertilisation**

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1. Explain the process of sperm production in the testes, including the roles of the seminiferous tubules and the role of accessory glands. |  |  |
| 1. Explain the process of ova production in the ovaries, including the maturation of the ova and the development of the follicle. |  |  |
| 1. State that the site of fertilisation is in the oviduct. |  |  |
| 1. Define the term zygote and describe the formation of a zygote. 2. Describe the implantation of the blastocyst.   **Key area 2: Hormonal control** |  |  |
| 1. Explain the role of hormones on the onset of puberty. |  |  |
| 1. State that the pituitary gland releases several hormones during the onset of puberty and is stimulated by a releaser hormone produced in the hypothalamus. |  |  |
| 1. State that the hormones released from the pituitary gland during the onset of puberty are Follicle Stimulating Hormone (FSH), Luteinising Hormone (LH) and Interstitial Cell Stimulating Hormone (ICSH). |  |  |
| 1. Describe the roles of FSH in promoting sperm production. 2. Describe the role of ICSH in the production of testosterone. |  |  |
| 1. State that testosterone stimulates sperm production and activates the prostate gland and seminal vesicles. |  |  |
| 1. Describe the negative feedback control of testosterone by FSH and ICSH. |  |  |
| 1. Explain the roles of FSH, LH, oestrogen and progesterone in controlling the menstrual cycle. |  |  |
| 1. Describe the development of a follicle, the corpus luteum and the endometrium through the menstrual Cycle. |  |  |
| 1. Explain the events of the follicular and luteal phases of the menstrual cycle. |  |  |
| 1. Describe the negative feedback control of FSH and LH by high levels of progesterone and oestrogen. |  |  |
| 1. Understand that this negative feedback control leads to menstruation. |  |  |