

5.1.4 Hormonal communication

- | | | |
|------------|--|--|
| (a) | endocrine communication by hormones | To include secretion of hormones into the blood, transport by the blood, and detection by target cells or tissues. |
| (b) | the structure and functions of the adrenal glands | Adrenal glands as an example of endocrine glands, to include the hormones secreted by the cortex and medulla and their functions. |
| (c) | (i) the histology of the pancreas | To include the endocrine tissues. |
| | (ii) the examination and drawing of stained sections of the pancreas to show the histology of the endocrine tissues | PAG1 HSW4 |
| (d) | how blood glucose concentration is regulated | To include the action of insulin and glucagon as an example of negative feedback, and the role of the liver AND the control of insulin secretion, with reference to potassium channels and calcium channels in the beta cells of the pancreas.

HSW12 |
| (e) | the differences between Type 1 and Type 2 diabetes mellitus | To include the causes of Type 1 and Type 2 diabetes and the treatments used for each.

HSW12 |
| (f) | the potential treatments for diabetes mellitus. | To include the use of insulin produced by genetically modified bacteria and the potential use of stem cells to treat diabetes mellitus.

HSW12 |