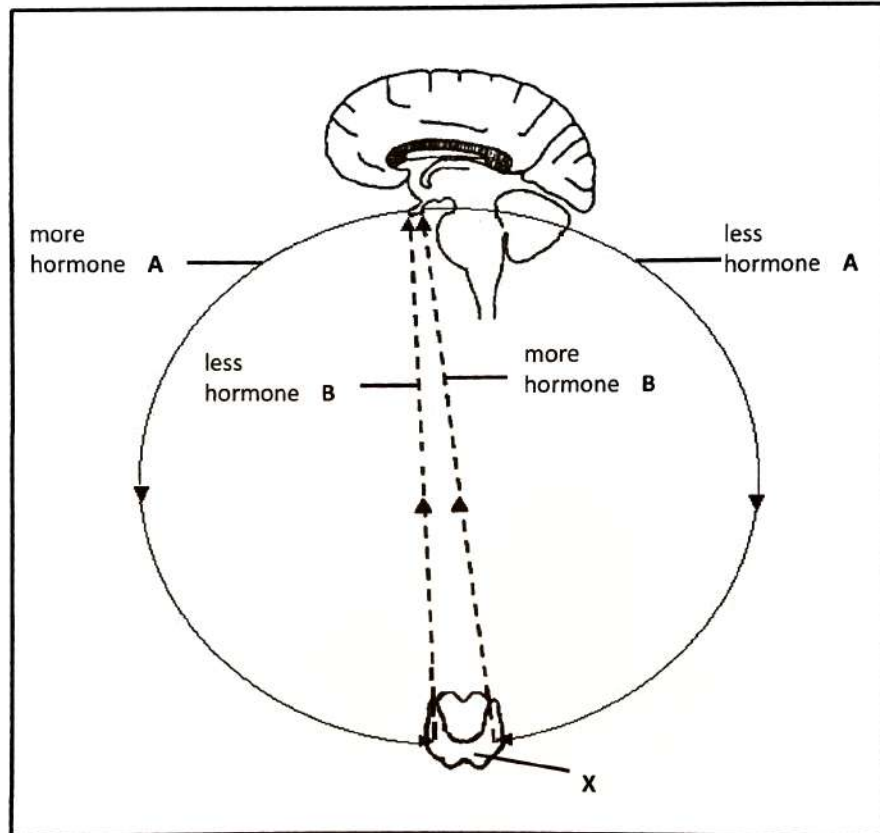


**ENDOCRINE SYSTEM AND HOMEOSTASIS**

- 1.1 A phenomenon where an increase in one hormone inhibits the secretion of another hormone.
- 1.2 A disease in which the hormonal control of blood glucose is defective because of a deficiency of insulin.
- 1.3 The increase of the internal diameter of blood vessels so that more blood flows through them.
- 1.4 The hormone that regulates the salt concentration in the human body.
- 1.5 The maintenance of a constant internal environment in living organisms.
- 1.6 A hormone which stimulates the secretion of thyroxin.
- 1.7 The maintenance of a constant internal environment in the body within certain limits.
- 1.8 The hormone responsible for osmoregulation.
- 1.9 The hormone that controls the concentration of water in the blood.
- 1.10 The hormone that increase the basic metabolic rate.
- 1.11 A gland of the digestive system that is both endocrine and exocrine.
- 1.12 The gland responsible for the production of the growth hormone.
- 1.13 The hormone which increases the absorption of glucose by the cells.
- 1.14 The system in the body that regulates processes by secreting hormones directly into the blood.
- 1.15 A hormone which stimulates secretion of the thyroid gland.
- 1.16 Glands that pour their secretion directly into the bloodstream.
- 1.17 Organ on which the adrenal glands are located.
- 1.18 Pancreatic secretion that increases the blood sugar levels

**ENDOCRINE AND HOMEOSTASIS**

1.1 The diagram below shows the hormones involved in the homeostatic control of metabolism in the human body. **X** is a gland found around the larynx in the neck.



1.1.1 Identify EACH of the following:

- (a) The gland that secretes hormone **A** (1)
- (b) Hormone **B** (1)

1.1.2 Name the mechanism in the diagram that regulates the level of hormone **B**. (1)

1.1.3 Half of gland **X** was surgically removed in a person.

State TWO possible effects that this would have on the secretion of the hormones referred to in the diagram above. (2)

## **ANSWERS: ENDOCRINE SYSTEM AND HOMEOSTASIS**

- 1.1 Negative feedback mechanism
- 1.2 Diabetes mellitus
- 1.3 Vasodilation
- 1.4 Aldosterone
- 1.5 Homeostasis
- 1.6 Thyroid Stimulating Hormone
- 1.7 Homeostasis
- 1.8 Anti-diuretic hormone
- 1.9 Anti-diuretic hormone
- 1.10 Thyroxin
- 1.11 Pancreas
- 1.12 Pituitary gland
- 1.13 Thyroxin / Insulin
- 1.14 Endocrine System
- 1.15 Thyroid Stimulating Hormone
- 1.16 Endocrine glands
- 1.17 Glucagon
  
- 1.1
  - 1.1.1 (a) Pituitary gland
    - (b) Thyroxin
  - 1.1.2 Negative feedback
  
  - 1.1.3 Less thyroxin secreted; more TSH secreted.