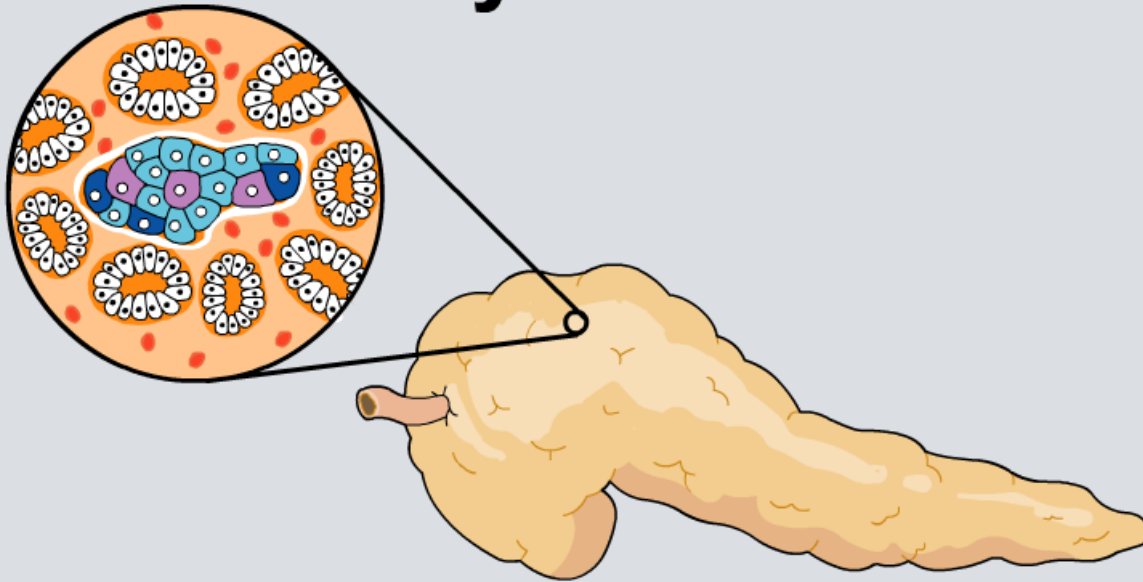
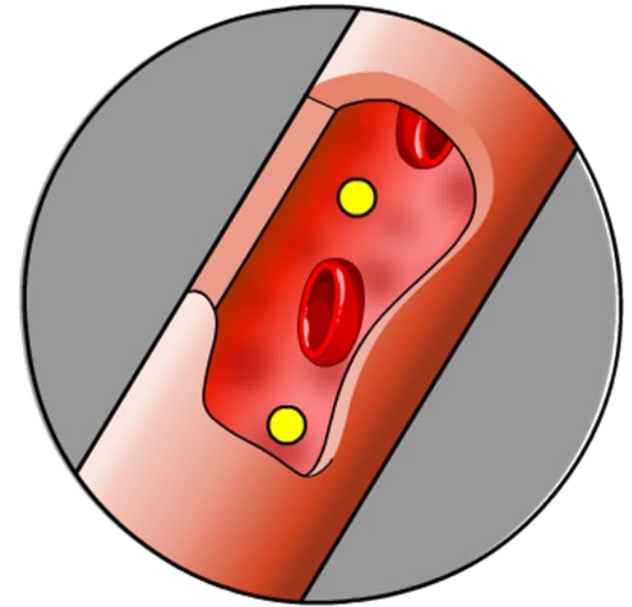


The Endocrine System



Mammalian **hormones** are substances that stimulate target cells via the blood.

Hormones are released directly into the blood plasma from **endocrine glands**. Each hormone has specific target cells on which it acts.



Once the hormone reaches a target organ, it affects the target cells by attaching onto specific receptors either on the surface of, or within, the cells.

Hormones are part of the **endocrine system**, which produces slow, long-lasting and widespread responses.



The endocrine system

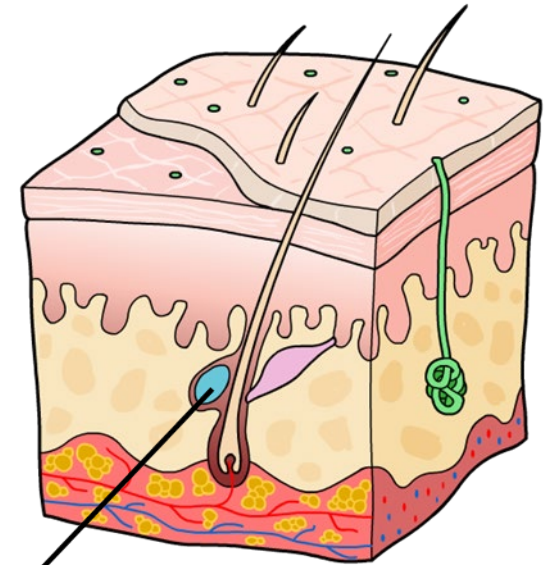




Exocrine glands are also present throughout the body. These contain ducts that carry products straight to target cells on the epithelial layers of internal or external body surfaces.

Exocrine glands do not produce hormones, but secrete other products, for example:

- **mammary glands** – secrete milk directly onto the surface of the breast
- **gastric glands** – secrete gastric juice onto the stomach lining
- **sebaceous gland** – secretes oily lipid-containing sebum onto the surface of the skin.



sebaceous gland

Structures in the pancreas



Which glands?

