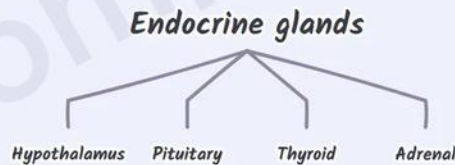


Chemical Coordination and Integration

a hormone travels the whole body in the blood but only ever acts where a matching receptor waits

The endocrine system, chemical messengers *

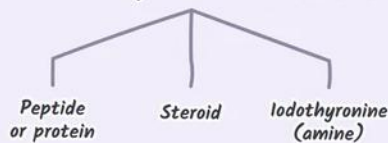
- endocrine glands are ductless: they release a hormone straight into the bloodstream, not through a duct
- a hormone travels the whole body in blood, acting only where a matching receptor waits
- hormones are the body's second coordination system, generally slower than nerves but longer lasting



four of the body's endocrine glands; the rest are covered alongside these

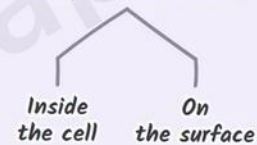
Hormones, sorted by chemical nature

Hormones, chemical nature



the three chemical classes a hormone can belong to, deciding where its receptor sits

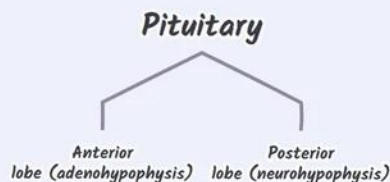
Receptor location



steroid/iodothyronine hormones act inside the cell, peptide/protein hormones act through a surface receptor

The hypothalamus and pituitary, the control axis

- hypothalamus sits above the pituitary and secretes releasing/inhibiting hormones that turn its secretion on or off
- the pituitary is called the master gland: several of its hormones control other glands in turn



the two lobes of the pituitary, each secreting a different set of hormones

