

Endocrine system:

As usual, under the control of the hypothalamus:

Hypothalamus controls pituitary

Pituitary controls many of the remaining hormones

produces hormones that activate other glands, in particular:

ADH

MSH

FSH & LH

others (see text)

vasotocin - birthing and egg laying

Other glands:

Thyroid: controls growth, metabolism, metamorphosis, shedding (ecdysis).

Parathyroid: found for the first time in amphibians: help maintain calcium metabolism (increases blood calcium levels)

Ultimobranchial: no longer found in reptiles, decreases blood calcium levels (in reptiles, the thyroid does this).

Adrenal glands: have medulla and cortex

Medulla: steroid hormones

Cortex: adrenalin

Pineal gland:

releases melatonin which regulates circadian rhythms.

may be associated with light receptors (not eyes!)

Pancreas:

Insulin, glucagon (or similar hormone), and a few other hormones

Not very compact in amphibians (spread out).

Gonads: estrogens and androgens - details later when we look at reproduction in more detail.