

The **sympathetic nervous system** controls the **fight/fright/flight** response, in other words, enables the body to respond to stressful events. One of the major ways in which this works is via the secretion of **adrenaline** by the adrenal gland. This system is a catabolic one, which means it expends stored energy.

The **parasympathetic nervous system**, in contrast, could be said to control **resting and digesting**. It is concerned with maintaining the status quo.

The **sympathetic nervous system** is like the Federal Government in the USA. It is concerned with large scale control; in the body, it effects widespread changes. Like the Federal Government, it has "central offices" (in the hypothalamus) and various "regional offices", the **sympathetic ganglia**. It also has "local offices" near the target organs.

Feedback is received from all these offices.

Just like the Federal Government, the complex functions can overlap or can affect an organ in different or contradictory ways.

The **parasympathetic system** is more like the state government, with "capital offices" (brainstem and lower spinal cord) and "local offices" near the target organs. Feedback comes from sensors on the target organs and from the thalamus. This system causes localised changes.