Reflex action

Starter

Stimuli 🡪 receptor 🡪 sensory neuron 🡪 CNS 🡪 motor neuron 🡪 effector 🡪 response

There are 2 types of effectors:

* Glands
* Muscles

reflex responses are fast, automatic responses to stimuli

Stimulus 🡪 receptor 🡪 sensory neuron 🡪 relay neurone 🡪 motor neuron 🡪 effector 🡪 response

Actions like blinking and moving food through the gut are also reflexes as we don’t have to think about them

Alcohol, tiredness and depressants can slow reflexes

**See synapse diagram in book**

The synapse is the **gap** between the 2 neurons

When a receptor detects changes in the environment, it will trigger electrical impulses through the sensory neuron to the spinal cord. This impulse passes to a relay neuron in the spinal cord. This impulse is sent directly back to the effector organ (like a muscle) along a motor neurone.

If you put your hand over a flame, electrical impulses will be sent along the sensory neuron to the spinal cord where the impulse is passed to a relay neuron. The impulse is sent back to the arm muscles using motor neurons. This results in the muscle contracting and your arm pulling back from the fire as it is dangerous.

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