

# Edexcel (B) Biology A-level

## 9.6 - Effects of drugs on the nervous system

### Flashcards

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# How does nicotine work?



## How does nicotine work?

Absorbed in the lungs. Travels to brain via bloodstream.

Similar shape to acetylcholine = binds to cholinergic receptors.

Stimulant effect causes symptoms of sharpness & relaxation.



# How does lidocaine work?



## How does lidocaine work?

Absorbed through skin or injected.

Blocks voltage-gated  $\text{Na}^+$  ion channels = prevents postsynaptic neuron from depolarising.

Prevents transmission of pain signals so acts as anaesthetic.



# How does cobra venom work?



# How does cobra venom work?

Blocks acetylcholine receptors on diaphragm = muscle cannot contract during inhalation.

Disrupts normal breathing.

