

# Acetylcholinesterase Inhibitors

Acetylcholinesterase inhibitors are interesting group of drugs that are used to treat a variety of diseases, including some forms of dementia.

## Principle

Acetylcholinesterase inhibitors affect the central nervous system, specifically the neurotransmitter known as acetylcholine. Neurotransmitters are compounds that transmit neuroelectric impulses between nerve cells and allow proper function of neurons. Lack of acetylcholine has negative influence on memory and decision-making. Acetylcholinesterase inhibitors block enzyme known as acetylcholinesterase (and possibly some other enzymes), which is responsible for degradation of acetylcholine. This leads to increase of amount of acetylcholine in nerve synapses and helps to relieve the symptoms of dementia.

## Indications

Acetylcholinesterase inhibitors are used for treatment of some forms of [Alzheimer's dementia](#) and other types of dementia such as dementia in [Parkinson's disease](#). Some preparations are useful in the treatment of [myasthenia gravis](#) and therapy of [glaucoma](#). [Glaucoma](#) is treated by acetylcholinesterase inhibitors in form of eye drops that decrease the intraocular pressure.

## Used substances

The used acetylcholinesterase inhibitors include active substances such as donepezil, rivastigmine and pyridostigmine.

## Disadvantages

The side-effects of acetylcholinesterase inhibitors are common, but usually not serious. They include digestive problems such as [diarrhea](#), nausea and [vomiting](#), [muscle weakness](#), [dizziness](#), [headache](#) and malaise. Higher doses of these medications may cause excessive salivation, [bradycardia](#) and [hypotension](#).