How do ACE inhibitors work?
ACE inhibitors block your body from producing a chemical called angiotensin II. When angiotensin II enters your bloodstream your blood vessels become narrower. This gives your blood less space to move in, which raises your blood pressure.

Angiotensin II also triggers a hormone that makes your body retain water. Having more fluid in your body, in a restricted space, will cause your blood pressure to rise. ACE inhibitors lower your blood pressure by reducing angiotensin II in your body. This allows your blood vessels to relax and widen, making it easier for blood to flow through. It also lowers the amount of water your body retains, which lowers your blood pressure.

Who might take ACE inhibitors?
Most people who have high blood pressure will need to take one or more medicines to control it. ACE inhibitors are a popular first-choice medicine for high blood pressure.

They are particularly recommended for people who are under 55 or who are not of African Caribbean origin. However, even if neither of these apply to you, you may be given an ACE inhibitor as a first choice. If you need to take more than one medicine to control your blood pressure enough, you may be given an ACE inhibitor as a second or third medicine.

Related information sheets
- Angiotensin receptor blockers (ARBs)
- Diuretics

ACE inhibitors can be useful for people who have diabetes or kidney disease as well as high blood pressure. This is because there is some evidence to show that they can protect your kidneys.

Who would not take them?
If you are pregnant, breastfeeding or planning a pregnancy, you should not be given an ACE inhibitor.

Rarely, ACE inhibitors can interfere with other health problems you may have, or with medicines you are taking. Your doctor should always consider your overall health and treatment, not just blood pressure treatment, before giving you any new medicine.

Do they have side-effects?
Most people will have no side-effects from their blood pressure medicines. They usually only happen when you start to take a new medicine, or a higher dose of your medicine. If you do experience a side-effect it may lessen over time as your body gets used to the medicine. If not, your doctor may change your dosage or your medicine if they feel it is appropriate.
The most commonly reported side-effect of ACE inhibitors is a persistent dry cough. If this happens to you, your doctor may change you to another medicine called an angiotensin receptor blocker (ARB). ARBs work in a similar way to ACE inhibitors but do not tend to cause a cough.

Other possible side-effects of ACE inhibitors can include: dizziness, tiredness, weakness, rash, headaches, and changes to your sense of taste.

Very rarely, taking an ACE inhibitor can trigger an allergic reaction which shows as swelling around the mouth or face. If an allergy affects your throat this could make breathing or swallowing difficult. If you have this kind of reaction, contact your doctor immediately.

Other things to be aware of

ACE inhibitors seem to work more better at lowering your blood pressure if you also reduce the amount of salt you eat.

Check with your doctor or pharmacist before taking any other medicines in combination with ACE inhibitors – such as over-the-counter treatments. If you are already taking a diuretic medicine prior to taking an ACE inhibitor, your doctor is likely to monitor you quite closely. This is because your first dose of an ACE inhibitor can sometimes cause a sudden drop in your blood pressure.

As with other blood pressure medicines, once you start taking an ACE inhibitor, be prepared to stay on it for the long term. Some people stop taking their medicines when they think their blood pressure is under control, but doing this can put your health at risk. If you have any concerns about your medicines, speak to your doctor or pharmacist.

About this information sheet

This information sheet was produced by the Information & Support team at the Blood Pressure Association. It is intended for people who have high blood pressure, or who are interested in high blood pressure. For more about how we make our information, go to www.bpassoc.org.uk/AboutUs