

Antibiotics?

- only when necessary!

Use of antibiotics may lead to bacteria developing antibiotic resistance. This may make it more difficult to fight a new infection. Antibiotics should only be used when there is a need for antibiotic treatment, and not just for safety's sake.



It is not always necessary to treat infections with antibiotics, as many infections will pass on their own. The body's own immune system is effective against many common infections caused by bacteria or viruses.



What are antibiotics, and how do they work? 'Antibiotics' is a generic term for many different types of medicines used to fight bacterial infections. The best known antibiotic is penicillin.

Antibiotics only work on bacterial infections and have no effect on infections caused by virus or fungus. In some cases, the doctor may determine through various examinations whether an infection is caused by a bacteria.

Antibiotics must NOT be given 'for safety's sake', as this increases the risk of developing resistant bacteria. There is also a risk of side effects such as diarrhoea, stomach aches or allergies. In some cases, the use of antibiotics may make you more sick. Antibiotics may combat the beneficial bacteria of the body and pave the way for disease-producing bacteria or fungi.

Resistant bacteria

Resistant bacteria are bacteria that are resistant to one or more antibiotics. Resistant bacteria develop because the bacteria become accustomed to antibiotics. The more antibiotics are used, the greater the number of resistant bacteria developed.

The consumption of antibiotics in Denmark has increased, which increases the number of resistant bacteria, thus making it more difficult to treat infections. It is therefore important to use antibiotics only when necessary.

Treatment with antibiotics

In some cases, the doctor will recommend treatment with antibiotics to prevent an infection from developing. Only take antibiotics prescribed to you by your doctor. The type of antibiotic depends on what type of bacteria is causing the infection, and where in the body the infection is located.

When you receive antibiotics, it is important that you follow your doctor's instructions. This also applies even if you feel well before having completed the course of treatment. You may contact your doctor to ask whether it is OK for you to interrupt the treatment.

How to avoid infection

The risk of getting infections or infecting others can be reduced by washing your hands frequently and carefully with soap or by using alcohol-based hand sanitiser. Use a clean towel and do not share a towel with others when you or others are ill. Sneeze and cough into a disposable tissue or possibly into your sleeve.

Infections from abroad

Bacteria which are resistant to the antibiotics normally used in Denmark are common in many places abroad. You should therefore tell your doctor if you have become ill abroad, or immediately after you have returned home.

Good advice on common infections

Colds and coughing

A cold will pass on its own, as it is always caused by a virus. It may last for up to two weeks. Coughing is a symptom that helps clear the airways.

- Drink plenty of fluids and make sure to rest when needed.
- Blocked nose and coughing can be relieved by:
 - Saline water spray or drops* (especially in young children).
 - Over-the-counter nasal spray or drops against nasal congestion for max. 10 days.
 - · Raising the headboard when you are lying down.**
 - Cough-suppressing medicine should only be used at bedtime and preferably in consultation with your doctor.
- Pain-relieving medicine (for example paracetamol) is taken for relief of headache or to make a fever go down.

Contact your doctor if you have difficulty breathing or your condition deteriorates and

you develop a fever. You should contact your doctor if your child has a high fever for several days or prolonged coughing attacks that exhaust the child.



Antibiotics must be given only when there are reasons for this



Sore throat (throat inflammation)

A sore throat is most often caused by virus and it will pass on its own. It may last for up to one week.

- Drink plenty of fluids and make sure to rest when needed.
- Pain on swallowing can be relieved with easy-toswallow foods, ice cream, hot and cold drinks and pain-relieving medicine (for example paracetamol), which will also make the fever drop.

Contact your doctor if there is no improvement after three days. In connection with sick children, you should contact your doctor after two days with symptoms or fever.

Flu

Flu is always caused by virus and will pass on its own. It may last for up to two weeks. Fatigue and coughing generally persist a little longer.

- Drink plenty of fluids (particularly in case of high fever) and make sure to rest.
- Cool your body if you have a fever; for example wear little clothes, sleep with a sheet as cover instead of a duvet and use cool cloths.
- Pain-relieving over-the-counter medicine (for example paracetamol) is taken for relief of pains or to make the fever go down.
- · See also under 'Colds and coughing'.

Contact your doctor if you have difficulties breathing. In case of sick children, you should contact the doctor if they have a high fever for several days. Patients with impaired immune system, patients with heart and lung disease and the elderly should contact their doctor in case of a severely affected general condition or deterioration.





Pain in the sinuses (sinusitis)

Pain in the sinuses is most often caused by virus and will pass on its own. It may persist for several weeks.

- Soreness of the sinuses can be relieved by:
 - Raising the headboard when you are lying down**.
 - Pain-relieving over-the-counter medicine (for example paracetamol).
 - Avoiding smoking.
- In case of a blocked nose, rinse your nose with saline water. Use a rhino horn, if needed. Over-the-counter nasal spray or drops against nasal congestion are also used for max. 10 days.

Contact your doctor in case of symptoms that persist for more than a week or if your condition deteriorates.

Pus in eyes/red eyes (eye inflammation)

Eye inflammation is most often caused by virus and will pass on its own. It may last for up to two weeks.

- Eye inflammation can be relieved by:
 - Removing discharge at the eye with a cotton pad/ foam cloth, moistened with boiled lukewarm water (preferably saline water*) several times a day. Use a new cotton pad/foam cloth for each wiping, and wash your hands before and after.

Contact your doctor in case of light sensitivity (photophobia), eye pain, disturbance of vision, or if there is no improvement after two days of treatment.

Pain in the ears (inflammation of the middle ear)

Pain in the ears is most often caused by virus and will pass on its own. It may last for up to three days.

- Drink plenty of fluids and make sure to rest when needed.
- Ear pain can be alleviated by:
 - Pain-relieving over-the-counter medicine (for example paracetamol).
 - Raising the headboard when you are lying down, or by sitting upright.
 - Reducing nasal congestion if your nose is blocked (see under 'Colds and coughing').

You should contact your doctor if

- · the pain-relieving treatment does not provide pain relief
- the pain does not alleviate in the course of 2-3 days
- · the antibiotic treatment does not result in improvement
- · your child's condition becomes increasingly worse
- there is discharge from the ears for more than two days
- doctor should also be contacted if your child has ear drainage
- your child is less than 6 months' old
- your child is less than two years old and has a double-sided infection or high fever and impaired general condition.



Different antibiotics act on different bacteria



^{*} Sterile saline water can be purchased. You can also make saline water yourself by adding a levelled teaspoonful of salt to half a litre of boiling water. Cool the water before use.

^{**} The headboard of the bed can be raised by placing bricks or books under the legs of the bed at the head end or putting folded towels or pillows under the head end of the mattress or pillow.

If your child needs medicine

Some children do not like taking medicine. The following general advice and tips can make it easier for the child.

- Explain to your child why the medicine is necessary and let your child take part in planning the treatment.
 Hang the plan where your child can easily see it, for example on the refrigerator.
- Keep calm and be firm when the medicine is to be given, but not severe or threatening. 'Bribery' may be necessary to get your child to cooperate. Remember to praise your child when he or she has taken his or her medicine.
- There are different types of medicine for children, for example liquid medicine and tablets that are to melt on the tongue. Talk to your doctor about what type of medicine will be best suited for your child and for the illness in question.

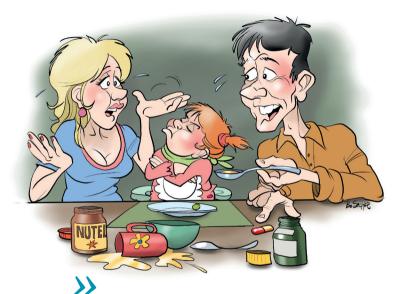
Good advice on the different types of medicine

Tablets (pills):

- Children may have difficulty swallowing tablets and must never be forced to do it, as they risk choking on them.
- Most tablets can be divided/crushed and mixed with a spoonful of yoghurt or a bit of lemonade. It is important that the medicine is mixed with as small a quantity as possible to ensure that the child eats/drinks it all and thus gets the right dose. Ask your pharmacist about whether your child's tablets can be divided/crushed.

Liquid medicine (mixture):

- The colder the medicine, the better it tastes.
- If the liquid medicine must not be stored in the refrigerator, you can give your child a spoonful of ice cream before and after medication.



Keep calm and remember to praise your child when he or she has taken his or her medicine.

- Most of the sense of taste comes from the nose. You may hold your child's nose.
- Using a disposable syringe, the medicine can be sprayed out to the side at the back of the mouth to produce an automatic swallowing reflex. Be aware of the risk of causing a vomiting reflex.

Nasal drops, nasal spray, ear drops and eye drops:

- Nasal drops, nasal sprays and ear drops feel less unpleasant if they are warmed between your hands or under hot water before being used.
- Eye drops often leave a taste in the mouth just after dripping, and you should therefore give your child a little bit to eat or drink to hide the taste.

Suppositories:

- Suppositories must be inserted into the rectum with the flat end first, so that there is greater likelihood of the suppository remaining in place.
- In order to facilitate the insertion, the suppository can be dipped in a bit of lukewarm water or be lubricated with a little Vaseline. The suppository must then be inserted immediately to avoid that it melts.

Tablets which melt in the mouth (orally dissolving tablets):

- Place the dissolving tablet on the tongue so that it can melt.
- The dissolving tablet can also be dissolved in a glass of water, which the child can drink

Ask your pharmacist about how to crush/divide tablets and about aids that can make it easier for the child to swallow the medicine.

If you use over-the-counter medicine

Always follow the instructions on the package or your doctor's instructions. Medicine should not be used for children under two years of age without a doctor's instructions.

Would you like to know more?

If you would like more knowledge about infections and the use of antibiotics, you can read more at these Danish websites: regionsjaelland.dk/antibiotika (in danish), antibiotikaellerej.dk (in danish), patienthaandbogen.dk (in danish), www.illadult.com.



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