

Did you know this about antibiotics?



WHAT ARE ANTIBIOTICS?

Antibiotics are used to treat, for example, bacterial skin infections, respiratory tract infections or urinary tract infections. Antibiotics either kill bacteria or slow down their growth.

Antibiotics are administered to animals through injections or orally as tablets or as a solution. They are also used locally for example in the form of ear or eye drops.

HOW ARE ANTIBIOTICS GIVEN?

Antibiotics are given in courses. Your vet will select the most suitable antibiotic for your animal, method of administration, dosage and duration of course. It is important to follow the vet's dosage instructions. The dosage may not be changed or the course ended without first discussing it with the vet. A course of antibiotics may not be started on your own using old medicines found in the cupboard.



ANTIBIOTICS ALONE DO NOT ALWAYS HELP

Antibiotics alone do not always cure a bacterial disease; other treatment may also be needed. These include keeping the infected area clean, or preventing the animal from licking the area. Your vet will provide care instructions. It is important that you follow them.

SOMETIMES ANTIBIOTICS ARE NOT NECESSARY

Antibiotics do not work on viruses, and are therefore not used on viral respiratory infections, for example. This means that your vet does not always prescribe antibiotics, but chooses the best treatment for your animal.

WHAT IS RESISTANCE?

Resistance is a bacterial defence mechanism against antibiotics. Bacteria can be naturally resistant to certain antibiotics or they can develop resistance as a result of antibiotic treatments. A bacterium can be resistant to more than one antibiotic, in which case it is called multiresistant.

RESISTANCE IS A CONCERN FOR ALL

Bacterial resistance is one of the most significant animal and human health threats. Bacteria develop ways to survive antibiotics faster than new antibiotics can be developed. Resistance may first appear in that antibiotics that previously provided a cure no longer have the desired effect and have to be replaced. It takes longer for the animal to get better, and the treatment is more expensive. At worst, there are no more antibiotics for the treatment of diseases caused by resistant bacteria. If this is the case, alternative treatment methods must be considered, but sometimes the animal may even have to be put down.

Antibiotic treatments also affect other bacteria than those that caused the disease. The body's own bacterial species can be affected, which can result in vomiting or diarrhoea. It is also possible that bacteria in one's own body can become resistant to the antibiotic, acting as a storage place for resistance factors and subsequently transfer resistance factors to other bacterial species.

The effects of the resistance are not limited to the individual animal, as resistant bacteria and resistance factors can be transferred between animals and humans.

LEGISLATION AND ANTIBIOTICS

Finnish legislation has ensured that antibiotics are used responsibly on animals. Certain medication used for serious bacterial diseases in humans may not be used on animals at all. Certain critically important antibiotics may only be used when other options are ineffective on the basis of laboratory results, for example. Legislation also requires that veterinarians must personally ensure the need for antibiotic treatment. This is why veterinarians cannot prescribe antibiotics without seeing the animal.

HOW CAN RESISTANCE BE PREVENTED?

- ▶ Antibiotics are always used judiciously and on the basis of a veterinary diagnosis. The vet always examines the animal, taking any necessary samples to determine the cause.
- ▶ Because resistance has increased in feline and canine skin and soft tissue infections, it is highly recommended that a sample be taken the first time. Early examination of the samples results in the best treatment of the animal.
- ▶ The vet will choose the most appropriate antibiotic, method of administration and dosage. If symptoms recur, the cause behind them must be determined.
- ▶ In recurring skin and ear infections, finding out the cause for them is crucial to overcome the infections.
- ▶ If the animal's condition requires that antibiotic treatment is started before the test results come through, the vet will primarily choose an antimicrobial drug according to the Recommendations for the Use of Antimicrobials.
- ▶ The animal's owner must follow the vet's treatment and medication instructions.
- ▶ Antibiotics alone will often not be enough; additional treatment may be needed also, such as cleaning the inflamed area or preventing the animal from licking it. These measures are just as important for the healing process as the antibiotic.