Antibiotics from animal husbandry are a threat to human health and the environment

Life-saving pharmaceuticals and resistant pathogens

Coughs and sniffles, colds and flu? Every winter, there is a sharp rise in the number of people suffering from these infections. In many cases, doctors prescribe antibiotics. Antibiotics are highly effective, potentially life-saving pharmaceuticals - but only as a treatment for bacterial infections. They have no effect on viral infections, which are the cause of ninety percent of infectious respiratory illnesses. The inappropriate or excessive use of antibiotics has substantial risks, because it contributes to the development of resistant bacteria, which renders these antibiotics less and less effective. As a result, there may no longer be a cure for some bacterial infections. Multidrug-resistant pathogens have become a serious global problem that threatens human health and the environment.

Antibiotics threaten nature and the environment

Like people, chicken, pig, and cattle can also become ill due to bacterial infections. The number of pathogens and thus the risk of an infection is higher in intensive animal husbandry, just like in places where crowds of people gather. Stress, high concentrations of ammonia and dust in the air, and a lack of daylight and freedom of movement have detrimental impacts on animals’ immune systems and promote the spread of diseases, which are then often treated with antibiotics. These drugs are not completely degraded in animals’ bodies and end up in the environment via air emissions, animal dung, and liquid manure. The fact that pharmaceuticals and drug-resistant bacteria have been found in swimming lakes, ground water, and soil is alarming. The damaging effects of antibiotics on soil fungi and fish as well as on plants’ ability to germinate, on their nutrient uptake, and on the growth of their roots have already been identified. To date, however, the environmental effects of (veterinary) pharmaceuticals have not been monitored systematically, so the actual extent of this form of pollution and its negative impacts is not known.

Antibiotics as last resort for seriously ill patients

The indiscriminate use of antibiotics in animal husbandry, as in health care for people, promotes the development of resistant pathogens. Research has already demonstrated that bacteria resistant to antibiotics can spread from farm animals to humans and vice-versa. The use of antibiotics considered as drugs of last resort in human medicine to treat farm animals - for example, colistin to combat mastitis in dairy cows - is especially problematic. When other drugs no longer work due to resistant pathogens, these reserve antibiotics are often the last hope for seriously ill patients. PAN Germany has advocated changing European laws on veterinary medical products to prevent the use of antibiotics considered as drugs of last resort in human medicine in animal husbandry. The fact that the new EU directive will ban the use of these antibiotics to treat farm animals completely or allow only certain exceptions is an important step forward that we welcome. But whether this will actually reduce applications in animal husbandry will depend to a large extent on these exceptions. PAN Germany will continue to carefully monitor how the directive is implemented.

Photo: Farm animals © designer_an - Fotolia.com
Healthy animals don't need antibiotics

PAN Germany has identified substantial deficits in policies protecting people and the environment from the hazards of (veterinary) pharmaceuticals and implementing the precautionary principle. To raise animals under conditions that ensure their health is maintained and they are treated individually if they become ill, many things have to change. On the one hand, breeders must aim for robust animals, rather than those that promise exaggerated weight gains or extremely high yields. On the other hand, livestock housing and management should permit species-specific and appropriate animal behavior. Promoting animal welfare has been shown to play an important role in maintaining animal health and reducing the need for veterinary pharmaceuticals.

PAN Germany advocates

- responsible animal husbandry that promotes animal welfare and animal health;
- changes in the goals pursued in breeding farm animals that favor sustained, lifelong performance and robustness rather than high yields that threaten animal health;
- a strict ban on the use of antibiotics considered as last resort in human medicine to treat farm animals;
- a strict ban on treatment of healthy animals with antibiotics;
- extension of government monitoring of the use of veterinary medical products to cover all forms of livestock farming and public access to this data;
- systematic and comprehensive monitoring of the environmental impacts of (veterinary) medical products;
- systematic environmental risk assessment for pharmaceuticals that were already on the market before 2005.

Find more information on https://pan-germany.org