





A problem

The rise of antibiotic-resistant bacteria in the world has reached devastating levels taking more than 700 000 human lives annually worldwide, and will kill over 10 million by 2050, which is more than cancer and equals to one person in every three seconds. Numerous studies have demonstrated that the routine use of antibiotics on farms promotes drug-resistant superbugs. This is because there are always some bacteria that the drug can't kill, and they survive and proliferate.

A simple way to overcome health problems caused by antibiotic resistance is to stop adding antibiotics to animal feed (science). It was found that when poultry and beef are produced without antibiotics, bacterial resistance quickly declines. Feeding antibiotics to livestock creates an ever-increasing number of antibiotic-resistant bacteria, including many that cause disease in humans.

The US Food and Drug Administration (FDA) claims that 80% of all antibiotics sold in the US are fed to food animals. In China this number is higher. Globally, consumption of antimicrobials by livestock is set to continue increasing and is estimated by Princeton Environmental Institute to rise by two-thirds between now and 2030.

Meat animals are fed antibiotics because doing so increases their weight gain, prevents desease and makes meat production cheaper. The UK government's Review on Antimicrobial Resistance and a report on antimicrobial resistance from the European Center for Desease Prevention and Control (ECDC) from November 15, 2017 contend that the rising number of infections resistant to antibiotics has set the world on the brink of catastrophe. Recently, in a literature review, only 5% of the 139 academic papers identified, argued there was no link between the antibiotic consumption in animals and the resistance in humans, while 72% found the evidence of the link. Since the livestock industry has put the society in a fundamental health danger of this magnitude, it can and should also help to stop it.



Our product

Our product is the only one on the global market that gives both treatment and prevention of both viral and bacterial infections in cattle.

Active substance: interferon, a protein

species-specific *

Action: kick-starts the immune system

Analogs: interferon drugs for humans exist already (hepatit-C, HIV)

* Interferon was named so for its ability to interfere with viral proliferation. The various forms of interferon are the body's most rapidly produced and important defence against viruses. Interferons can also combat bacterial and parasitic infections, inhibit cell division and promote or impede the differentiation of cells. They are produced by all vertebrate animals and possibly by some invertebrates as well.







Mechanism of action

- The product is identical to animals' own interferon.
- The product gives a broad and natural activation of the immune defense.





Benefits







Technical breakthrough

- A unique combination of species-specific interferons
- Purification with sustained protein activity
- Great stability: shelf life over one year





Increases production and reduces costs

In a study using product prototype the survival of calves improved from 60% to 95% with one treatment

Loss of calves translated to loss of income (in Sweden):

- 100 € per one dead newborn calf
- 150 € per one dead 2 month old calf
- 300 € per one dead 6 month old calf

Sickness costs:

- veterinarian 150 € / calf
- worktime other personnel 30 € / calf
- prolonged period of milk diet 15 € / calf and month
- prolonged breeding interval 50 € / month and calf







Product use cases

The product prototype was successfully tested in Eastern Europe (about 400 000 injections tested) and showed to improve cattle health, descrease mortality, eliminate the need of antibiotic overuse and decrease farming costs dramatically.

The product should be injected at least twice with a 24-hour interval to achieve the prophylactic effect, and one time every day until the injection symptoms resolve to achieve treatment of outbreaks.

FarmPharma aims to further complement this prototype so that it corresponds to safety and quality standards of EU and the rest of the world, and to introduce this new product to the European and global market.



