

## **Antibiotic resistance – caused by inclusion of antibiotics in feeds**

Antibiotic resistance is the ability of a microorganism, usually a bacterial species, to withstand the effect of an antibiotic. These so-called antibiotic resistant bacteria can constitute a severe threat to public health, national security and economy.

There is mounting evidence that there is strong correlation between antibiotics' use in animal husbandry and the increase in bacterial resistance in humans, and these infections caused by antibiotic resistant bacteria are difficult or impossible to cure<sup>1</sup>.

Due to the fact that the use of antibiotics as growth promoters has been shown to cause risks to human health, all antibiotic growth promoters have been banned in the European Union since 2006. However, in other regions around the world, antibiotics are still used as growth promoters, encouraging the proliferation of Methicillin-resistant *Staphylococcus aureus* (MRSA) and other drug resistant bacteria.

MRSA infection is caused by a strain of staphylococcus bacteria that has become resistant to the antibiotics commonly used to treat ordinary staphylococcus infections. Last week, the US government announced a comprehensive set of new federal actions to tackle the rise of antibiotic resistant bacteria and protect the public health<sup>2</sup>.

Nor-Feed A/S develops natural additives, which are completely safe for humans, animals and the environment. These additives can constitute efficient alternatives to many of the traditional growth promoters, which are included in animal feed and drinking water.

### **References**

1) WHO, 2011. Tackling antibiotic resistance from a food safety perspective in Europe.

2) Feedinfo, 19/09/2014. U.S. New Executive Actions to Combat Antibiotic Resistance.