

## **Public health risks of antibiotic use in food animals**

Antibiotics are largely used in the production of food animals; however, the topic remains a controversial one. Antibiotics used in this manner are considered any medicine that destroys or inhibits bacteria in an animal being reared for food consumption. Antibiotic growth promoters are usually administered at a low, sub-therapeutic dose with the arguably favourable end result of improved quality of the product. Such medication is credited with growth promotion as well as enhancing the efficiency of feed conversion.

However, it can be countered that the overuse of antibiotics over a period of time may lead to the bacterial populations becoming resistant to the antibiotics. The farming industry is the second largest consumer of antibiotics (after medical practitioners) accounting for approximately 40 percent of antibiotics. This is a serious concern. A recent report entitled “*Antibiotic resistance threats in the United States, 2013*” highlights the burden and threats posed by the antibiotic-resistant germs having the most impact on human health. It is estimated, by the Centre for Disease Control (CDC) that each year in the United States at least 2 million people become infected with bacteria that are resistant to antibiotics and at least 23,000 people die each year as a direct result of these infections.

Human health can be affected as a consequence of the use of antibiotics in food animals, either directly or indirectly through residues in meat, which may cause side effects. On the other hand, human health can be indirectly affected by a pathogen resulting from antibiotic resistance. Of particular concern is the development of pathogens resistant to multiple antibiotics.

It should be noted that there are possible alternatives to the use of antibiotic growth promoters. There are two main theories to reducing the dependence on antibiotics. Firstly, alternatives to antibiotics need to be developed that would work along similar pathways with animal metabolism. The other alternative is to improve animal health, which is the hypothesis deemed to be more difficult to achieve.

In the fight against antibiotic resistance, the avoidance of the administration of antibiotics should be the primary choice.

The current growth in the resistance of bacteria shows us the need to stop the unnecessary and inappropriate use of antibiotics. It is our sincere hope that persons take more care in management of antibiotic drug use for the safety of future generations.

### **References**

Antibiotic Growth-Promoters in Food Animals. Available online at:

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