ANTIBIOTICS IN ANIMAL AND FOOD PRODUCTION
(see resolution Food-1-99)

Shortly after the discovery and widespread introduction of antibiotics into medical practice 50 years ago, scientists observed that bacteria could develop resistance to them. The more antibiotics are used, the more rapidly resistance develops.

When such resistance develops, bacterial growth is no longer stopped by the antibiotic, and, thus, the antibiotic is no longer capable of treating or curing the disease. Antibiotic resistance can transform infections from easy to treat to illnesses that require prolonged treatment, necessitate lengthy hospitalization or cause death.

Since the 1950s, farmers have been using antibiotics as a production tool in raising livestock. They add antibiotics to livestock feed to counteract the effects of crowded living conditions, poor hygiene, and to promote enhanced body weight of the animal. Such use causes the development of antibiotic resistance among food born pathogens that can infect people who consume tainted meat or touch infected animals. It can also result in antibiotic resistance in non-pathogenic bacteria. Those bacteria may transfer their resistance genes to disease-causing bacteria, resulting in antibiotic resistant infections in people.

Today, antibiotics are used in animals in three ways: therapeutic use (antibiotic administered to treat animals suffering from a bacterial infection), prophylactic use (antibiotic used to prevent bacterial infection and disease), and growth promotion (antibiotic used to improve the efficiency of animal feed digestion or absorption).

Consumer concerns:

Today antibiotic resistance is a growing public health problem. There is a grave worldwide concern among health authorities, physicians and researchers working in the field of infectious diseases that rapidly emerging antibiotic resistance will significantly reduce possibilities of treating common infectious diseases in humans, with increased fatal consequences.

Consumers recognize that antibiotics have a vital role to play in human and animal medicine. However, considering that no new antibiotics are likely to become available in the near future, they are extremely concerned about the dramatically increasing resistance of bacteria in both human and animal medical treatment.
The major factors contributing to the problem are: uncontrolled use of antibiotics in human medicine, excessive use in animal husbandry, and use of antibiotics in plants and for crop protection. With regard to animal farming, antibiotics are not just used to cure infections, but are also routinely added to livestock feed to prevent infections in healthy animals and as growth promoters.

Resistant strains of zoonotic bacteria like *Salmonella*, *Campylobacter* and *E.coli* have been transmitted from animals to humans, through food.

Resistance to one antibiotic can lead to resistance to other related antibiotics. For example, a bacteria resistant to Avoparcin, an antibiotic used in animal feed, may also be resistant to Vancomycin, the most powerful antibiotic used against *Staphylococcus aureus*. Even if today no direct evidence exists between the use of Avoparcin and the increase of Vancomycin-resistant bacteria, it is highly likely that Avoparcin in animal feed may increase cross-resistance by increasing the number of Avoparcin-resistant bacteria in animal guts and faeces.

The use of antibiotic growth promoters encourages the colonization of resistant bacteria like *Salmonella*, *E.coli*, etc. in the gut of animals.

In conclusion, TACD considers that antibiotic resistance is a prime example of an issue to which the precautionary principle should have been applied at an early stage, and an issue, which demonstrates why it is now so important to take a precautionary principle.

**Recommendations:**

- TACD calls for a total ban on the non-medical use (including use as growth promoters) of antibiotics in animal and food production, and a ban on the prophylactic use of antibiotics except where disease has been identified in an animal or within a group of animals.
- TACD calls for an overall reduction in the prophylactic use of antibiotics in animal medicine.
- TACD demands that all antibiotic usage in animals be subject to veterinary prescription.
- TACD emphasizes the need to improve hygiene on farms and improve animal housing by new concepts for feed and management, which would reduce substantially the need to use antibiotics for prophylactic and therapeutic treatment. A coherent strategy should be developed, as well as research on alternative production methods.
- TACD calls for a total ban on the use of antibiotic in plant/crop protection.
- TACD calls for a ban on antibiotic resistant marker genes in genetically modified crops.
- TACD requests that the national health authorities implement a strategy to limit any unnecessary and uncontrolled consumption of antibiotics, including the introduction of prescription only antibiotics and a limitation of the consumption of broad-spectrum antibiotics.
• TACD demands that within CODEX and the World Trade Organization (WHO) priority is given to measures to reduce antibiotic resistance because it is a global issue.