Maintaining the efficacy of antibiotics requires bold decisions and international cooperation

The experts who met at the Finnish Food Safety Authority Evira on 9 November 2010 have prepared a declaration, stating that the efficacy of antibiotics cannot be taken for granted. In Finland, where the situation is still good, action can be taken to maintain the efficacy of antibiotics. However, this will require joint efforts by the various bodies involved. The aim is to safeguard human and animal health. In Finland, most bacteria isolated from animals are still highly sensitive to antibiotics. However, in Finland too, some bacteria which cause diseases in animals are resistant to a range of antibiotics. Bacteria resistant to almost all available antibiotics have been found in companion animals. Antibiotics must be used responsibly. Food of animal origin must be safe and human health must not be jeopardised. Consumers should be provided with information on the objectives of Finnish food production. These include low risk of human and animal diseases, good production conditions, animal welfare and ethically acceptable animal production.

An important question arose in the discussions concerning the impact on human health of foodstuffs originating in countries where resistance is poor or even unknown.

1. Antimicrobial resistance and bacteria do not respect boundaries. Taking action in Finland alone will not be enough; we must influence international decision-making. At international level, in the effort to maintain the efficacy of antibiotics, Finnish experts continue to be highly active in all areas.

   ・ Experts should participate actively in the work of the EU, the Codex Alimentarius Commission and the World Organisation for Animal Health (OIE).
   ・ The principle of controlled use of antimicrobial drugs should be emphasised strongly in the marketing authorisation procedure for medicinal products.
   ・ Finland is a forerunner in seamless cooperation on the use of antibiotics in human and veterinary medicine. Monitoring results and conclusions should be published jointly.
   ・ If recommendations on the use of antibiotics are insufficient to control the resistance situation, we must have the will to guide and restrict their use.

2. Our favourable situation with respect to animal diseases should be maintained, since this forms the basis for the controlled use of antibiotics and animal welfare. Effective measures must be made to restrict the spread of resistance factors.

   ・ The production structure must continue in such a form that the risk of disease can be controlled while Finnish food production remains competitive.
   ・ Animal husbandry must be ethically acceptable. Herd health programmes should be ensured on all farms.
   ・ Effective biosecurity and good production conditions on farms should be ensured.
   ・ Animals should be medicated in accordance with good veterinary practice. It must be ensured that the veterinarian provides the animal’s owner, or the producer, with sufficient information and guidance on the correct use of the medicinal product, if the owner is responsible for administering it.
   ・ In the medication of companion animals, it should be ensured that efficient medicinal products are also available for their treatment in the future.
   ・ Recommendations on the use of antibiotics should be updated regularly.
   ・ Animal breeding should be carried out in such a manner that it does not increase the incidence of
Control of animal diseases and the associated risk relating to the import of animals should be managed. Pets are in very close contact with people. Intervention is required to prevent the smuggling of pets (street dogs and cats) and more information should be provided on import risks.

3. Medication should be based on a reliable diagnosis, the identification of the pathogen and a susceptibility testing.
   - A microbiological diagnosis should be made if animals are medicated repeatedly or if medicated feedstuff is delivered for medication. When deciding on the medication of large numbers of animals (including fish and fur animals), a microbiological diagnosis should always be the aim, followed by a susceptibility testing if necessary.
   - The diagnostics of infectious diseases of pets and horses should also be developed. Decisions on medication should mainly be based on the identification of the pathogen and susceptibility testing.
   - Veterinary clinics should make provisions for the prevention of infections and the control of multidrug-resistant bacteria.

4. Monitoring of the use and resistance of antibiotics should be developed.
   - Finland has been monitoring the overall consumption of antibiotics for years. In addition, new methods and resources, for monitoring the indication-specific consumption of medicinal products, are needed in the case of all animal species.
   - Monitoring systems for the herd health of cattle and swine (Naseva and Sikava) include monitoring of the use of medicinal products. These systems provide indication-specific information on each animal species, which should be published as soon as it has been compiled.
   - The microbe and resistance load accompanying imported animals and food should be monitored, and the results published as part of resistance monitoring.
   - Monitoring the resistance of pathogens is not enough; the resulting information must be applied effectively.
   - In the case of pets and horses, targeted and systematic monitoring should be initiated of the use of antibiotics and the resistance of isolated pathogens.

5. Information should be actively disseminated on the use of antibiotics and the resistance situation.
   - Information on resistance and the consumption of antibiotics should be utilised in training and communications.
   - Training and communications for veterinarians and animal owners should be increased, on the use of antibiotics and the related risks, recommendations on their use and the importance of compliance with recommendations.
   - The latest scientific knowledge should be assessed continuously and utilised, for example, when updating treatment recommendations.
   - More information on the effects of the controlled use of antibiotics on food production should be produced for decision-makers and consumers.

6. Research resources should be increased.
   - In Finland, more resources are needed for high-quality, interdisciplinary research into infectious animal diseases. Such research activities should cover the occurrence of resistance and the routes through which disease spreads due to contacts with animals, as well as via foodstuffs and the environment.
   - Economic studies are required on the effects of animal health care programmes on the profitability of
production and on the use of medicinal products