

---

## **ANIMAL HEALTH, ANIMAL WELFARE, BIOSECURITY AND ENVIRONMENTAL PROTECTION AS MAJOR COMPONENTS OF SUSTAINABLE ANIMAL PRODUCTION**

**Köfer, J.**

*Department of Veterinary Medicine, Austrian Agency for Health and Food Safety,  
Spargelfeldstraße 191, A-1226 Vienna*

### **SUMMARY**

European consumers are becoming increasingly concerned with safety and animal welfare in food production. They want to know more about breeding methods, fattening procedures and animal husbandry, prevention and eradication of severe animal diseases, meat inspection, and recently also about the sustainability of animal production in general. EU member states are obliged to improve the health status of farm animals, to reduce the human health risk from the consumption of food of animal origin and to guarantee free intra-Community trade. When Austria joined the EU on 1 January 1995, this obligation led to a considerable extension of the scope of tasks to be performed by the veterinary service and to the implementation of new methods in food production and monitoring.

#### **Animal health**

The EU has put in place a large number of directives, decisions and regulations to ensure and monitor the health status of farm animals and has established common rules for the control of epidemic and endemic diseases as well as additional guarantees and surveillance programmes. Food animal production systems vary in different regions of the world. In countries practising intensive animal production, thousands of animals are kept in confinement in large operations. In other countries, like Austria, production is less intensive (with the exception of poultry production), largely pasture based and often small in scale. All EU member states have established veterinary service systems for implementing “herd health programmes” to improve animal health based on process optimisation. Farmers are at the beginning of the food production chain and therefore have a great responsibility in safeguarding animal health and the quality of animal products. Improvement of animal health is also a great challenge for veterinarians. In Austria, we set up the “Animal Health Service” (AHS) in the 1990s, with farmers and veterinarians working together to increase the productivity of the farms, to improve the quality of food of animal origin and to establish a quality assurance system. The AHS, in cooperation with the Austrian Veterinarian Association, has defined specific rules of cooperation between veterinarians and farmers. Regular veterinary audits are undertaken by private veterinary surgeons who are members of the Animal Health Service.

#### **Animal welfare**

The EU has already taken various practical steps to secure real improvements in animal welfare in order to respect the basic five freedoms: freedom from discomfort, from hunger and thirst, from fear and distress, from pain, injury and disease, and freedom to express natural behaviour. The

European Union has already put in place welfare standards for animals kept for farming purposes, such as laying hens, calves and pigs. The Community Action Plan (CAP) on the protection and welfare of animals, adopted in January 2006, also responds to the principles of the Amsterdam Treaty. Recent CAP reform measures have introduced the principle of cross-compliance with various standards for beneficiaries of direct payments, including animal welfare standards, from 2007. The “Integration of animal welfare in the food quality chain: from public concern to improved welfare and transparent quality” is of great importance. In January 2007, a new regulation on the welfare of animals during transport came into force. Banning of long distance transport of live animals for slaughter or further fattening would be a sensible step because animals would not be subjected to long periods in transit. The protection of animals from avoidable suffering, pain or damage during transport to the slaughter facility as well as the topics of stunning and exsanguination is currently at the centre of hot public debate.

### **Biosecurity**

Biosecurity is the prevention of disease-causing agents entering or leaving any place where farm animals are present. Biosecurity measures are of special importance in the case of an outbreak of an exotic notifiable disease such as Foot and Mouth Disease (FMD), Classical Swine Fever (CSF), Avian Influenza or infections with Bluetongue virus in ruminants. The main risk factors responsible for spreading disease include farm-to-farm movement of infected livestock, contact with animals and their excrements, clothes, boots, vehicles and equipment. Disease can also be spread by other means, such as wildlife, other vectors or airborne transmission. Implementing biosecurity measures as Standard Operating Procedures (SOPs) helps ensure that those people working with farm animals or coming into contact with them do not spread disease.

### **Environmental protection**

Protection of the environment requires activity on many different fronts – from limiting global environmental threats (such as global warming, or greenhouse gases), to safeguarding individuals from the effects of poor air quality or toxic chemicals. Actions to protect the environment also provide benefits in improved energy efficiency and more efficient use of resources, such as re-use, recycling and recovery of waste. From the veterinary point of view, the safe utilisation of animal by-products (i.e., products of animal origin that are not intended for human consumption) such as animal carcasses, catering waste, butcher and slaughterhouse waste, blood, pet animals etc. is of special importance. The collection and decontamination of fallen stock in rendering plants according to Regulation 1774/2002/EU is also of great significance in terms of biosecurity. Animal by-products can be processed not only in conventional rendering plants but also in a wide range of other technical and biological processes, as for example in approved biogas or composting plants throughout the EU.

### **Sustainable development**

A widely used international definition of sustainable development is: “*development which meets the needs of the present without compromising the ability of future generations to meet their own needs*”. At the beginning of the 21<sup>st</sup> century the public is becoming more and more aware that the current model of development is unsustainable and that our way of life is placing an increasing burden on the planet. Global energy demand could double as a result of population growth in the next fifty years, global water use has more than tripled since 1950, and production, distribution

---

and consumption of food is responsible for approximately 25% of total greenhouse gas emissions. It is in our long-term best interests as veterinarians to play an active part in contributing to a more sustainable development in the production of food of animal origin. So let's make a start in this direction in our everyday work "along the food chain" and thus pave the way towards sustainable animal production.