EFSA to consider meat inspection modernisation

Meat inspection helps to detect and prevent public health hazards such as foodborne pathogens or chemical contaminants in food of animal origin. Yet existing inspection practices often date back decades and might not always adequately protect public health.

Visual checks for the presence of gross lesions or flaws in the meat may have sufficed in meeting the health objectives of the past, but they are not always suitable for detecting foodborne diseases better understood today, such as campylobacteriosis, salmonellosis and viral strains of E. coli, or contamination by chemical substances such as steroids or veterinary drug residues.

Meat inspection also plays an integral part in the overall monitoring system of certain animal diseases and the verification of compliance with animal welfare standards. This constitutes an important control point for the early identification of potential problems that may impact on public health as well as animal health and welfare.

Independent advice

The European Food Safety Authority (EFSA) provides independent scientific advice and technical support to risk managers on specific hazards and production systems related to meat inspection. EFSA's findings are used by risk managers in the EU and the Member States to improve existing control options for meat inspection.

In May 2010 the European Commission requested EFSA's assistance in preparing a modernisation programme for meat inspection. EFSA is charged, together with the European Centre for Disease Prevention and Control (ECDC), with helping to introduce a risk-based approach to meat inspection, at all relevant stages of the meat production chain.

To fulfil this complex mandate, EFSA is drawing on its expertise in a wide range of fields within its scientific remit: animal health and welfare, chemical contaminants in the food chain, biological hazards including zoonoses, risk assessment methodologies and data collection.

Specifically, EFSA must identify and rank public health hazards in meat, and may recommend possible improvements or alternative methods at the EU level, including revising current methods that may be inefficient in detecting risks or disproportionate to the risk involved. EFSA's recommendations must take account of the impact of proposed changes in meat inspection on animal health and welfare monitoring, and propose possible remedies if required.

The ranking covers biological hazards that are targeted by existing inspections such as cysticercosis, trichinelliosis, glanders in solipeds (single-hoofed mammals, for example horses), tuberculosis and brucellosis, but may be broadened to other hazards.

Transmissible spongiform encephalopathies (TSEs) are not within the scope of this mandate and are dealt with by EFSA in other scientific opinions.

The chemical risks involved chiefly fall into three areas: the residues of veterinary drugs (such as antibacterial substances or sedatives), unauthorised or prohibited anabolic substances (such as growth hormones or meat quality enhancers) and other chemical contaminants. Furthermore, EFSA is required to put forward epidemiological indicators for specific public health hazards which can be used to consider adaptations in meat inspection methods. The scientific outputs of EFSA on meat inspection will be grouped by species or groups of species:

- Domestic swine.
- Poultry.
- Bovine animals over six weeks old.
- Bovine animals under six weeks old.
- Domestic sheep and goats.
- Farmed game and domestic solipeds.

EU framework

The April 2004 Hygiene Regulations consolidated and simplified 17 outdated and often overlapping EU directives, resulting in an innovative and transparent single hygiene policy that shifted primary responsibility for food safety throughout the food chain to food operators. These new rules entered into force on 1st January 2006.


Regulation (EC) 854/2004 lays down rules for controls on food of animal origin with the aim of assessing whether or not meat and other animal derived products are fit for human consumption.

An additional important objective is to ensure the well being of the animals themselves. This process comprises monitoring for zoonotic infections and agents and certain animal diseases through checks on traceability, animal welfare, materials and other by-products, as well as laboratory testing and ante-mortem and post-mortem inspection.

Data collected in this way may be used to perform a risk analysis based on harmonised human health criteria. Based on the experience of applying the Hygiene Regulations, in November 2009 the Member States called for new rules to modernise meat inspection in EU slaughterhouses and instructed the Commission to develop a risk-based approach for considering specific hazards or production systems.

The scientific opinions of EFSA with the input of the European Centre for Disease Prevention and Control are key elements in the Commission's legislative proposals.

The EU framework including EFSA's opinions and recommendations must give due consideration to relevant international guidelines: the Codex Alimentarius' Code of Hygienic Practice for Meat, and the Terrestrial Animal Health Code of the World Organisation for Animal Health (OIE), specifically Chapter 6.2 on Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection, and Chapter 7.5 on Slaughter of animals.

EFSA's activities

Since 2004 EFSA has published opinions on meat inspection procedures and provided advice on inspecting the meat of various animal species for tuberculosis and the trichinella, cysticercus and echinococcus parasites.

Main work in progress

Scientific opinion and technical assistance on the public health hazards to be covered by inspection of meat:

- Scientific Panels:
  - Animal health and welfare (AHAW): Working groups.
  - Biological hazards (BIOHAZ): Working groups.
  - Contaminants in the food chain (CONTAM): Working groups.

- Other Units:
  - Assessment methodology (AMU).
  - Data collection and exposure (DATEX).
  - Zoonoses data collection: Working groups.

Future milestones

- 30th June 2011 – deadline for domestic swine.
- 30th June 2012 – deadline for poultry.
- 30th June 2013 – deadline for bovine animals, domestic sheep and goats, farmed game and domestic solipeds.