

Committed *since 2002*
to ensuring that Europe's food is safe



The role of EFSA in Animal Welfare

**BTSF Workshop on EU Legislation on Animal Welfare
Seoul, 10/10/2012**

**Maria Ferrara
Animal Health and Welfare Unit (AHAW)**

1. What's *EFSA*?
2. Contributing to the *development of standards* for animal welfare
3. Performing animal welfare *risk assessment* in a global context
4. Promoting *outcome-based measures* for animal welfare

1. What's EFSA?

- Set up in January 2002*, **provide independent scientific advice** and support for EU law/policies on food and feed safety
- Provide **independent risk communication**
- Promote **scientific cooperation**
 - Networking
 - Monitoring
- Budget 2012 of 78 Million Euros
- Final 2011 \approx 652 outputs

* REGULATION (EC) No 178/2002



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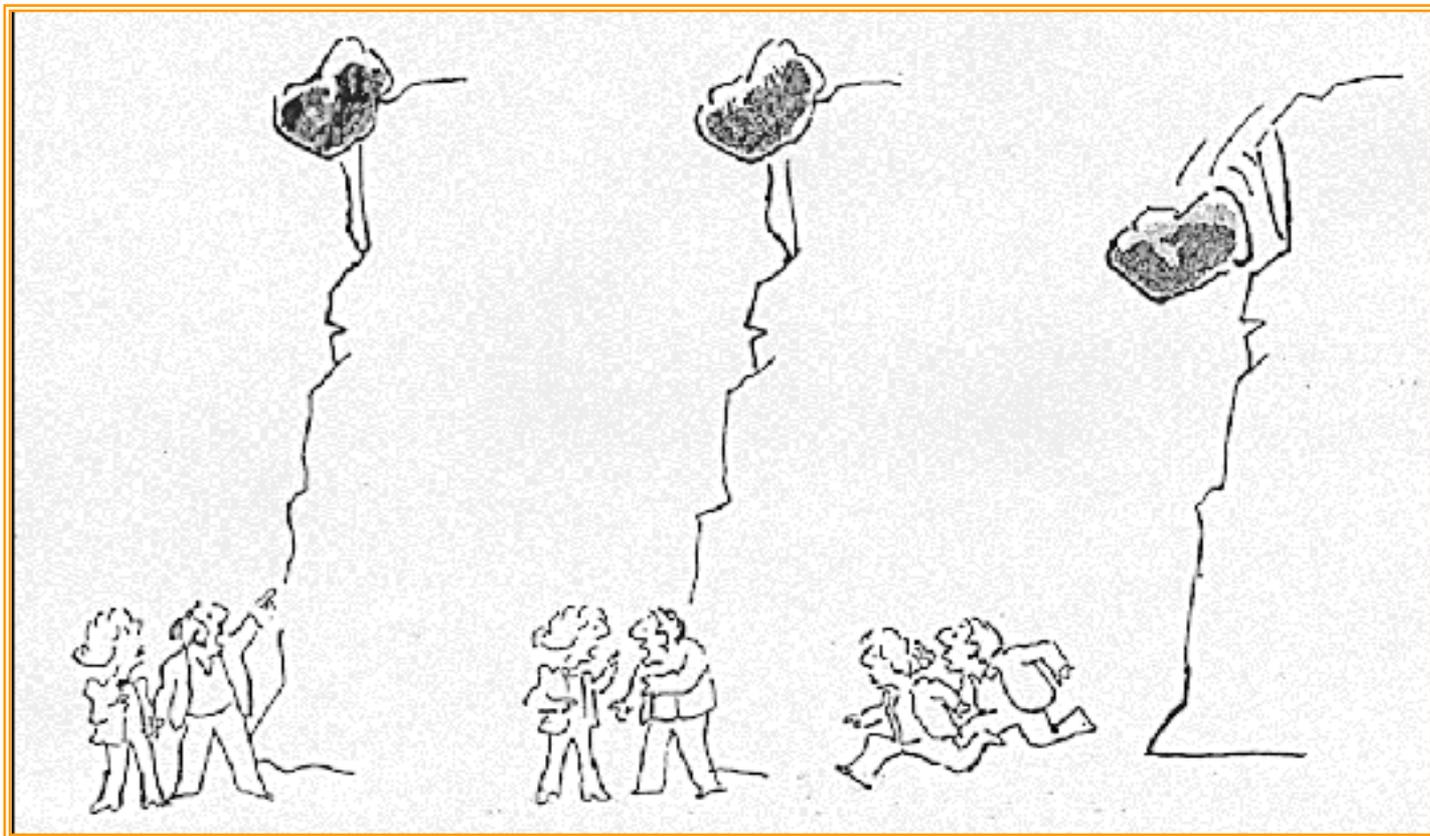


A process consisting of three components

risk assessment

risk communication

risk management



Scientific advice from farm to fork

Plant Health



Plant Protection



Genetically modified organisms



Animal feed



Animal health and welfare and their diseases



Biological food chain hazards



Food chain contaminants



Food additives
Flavourings and
Processing aids

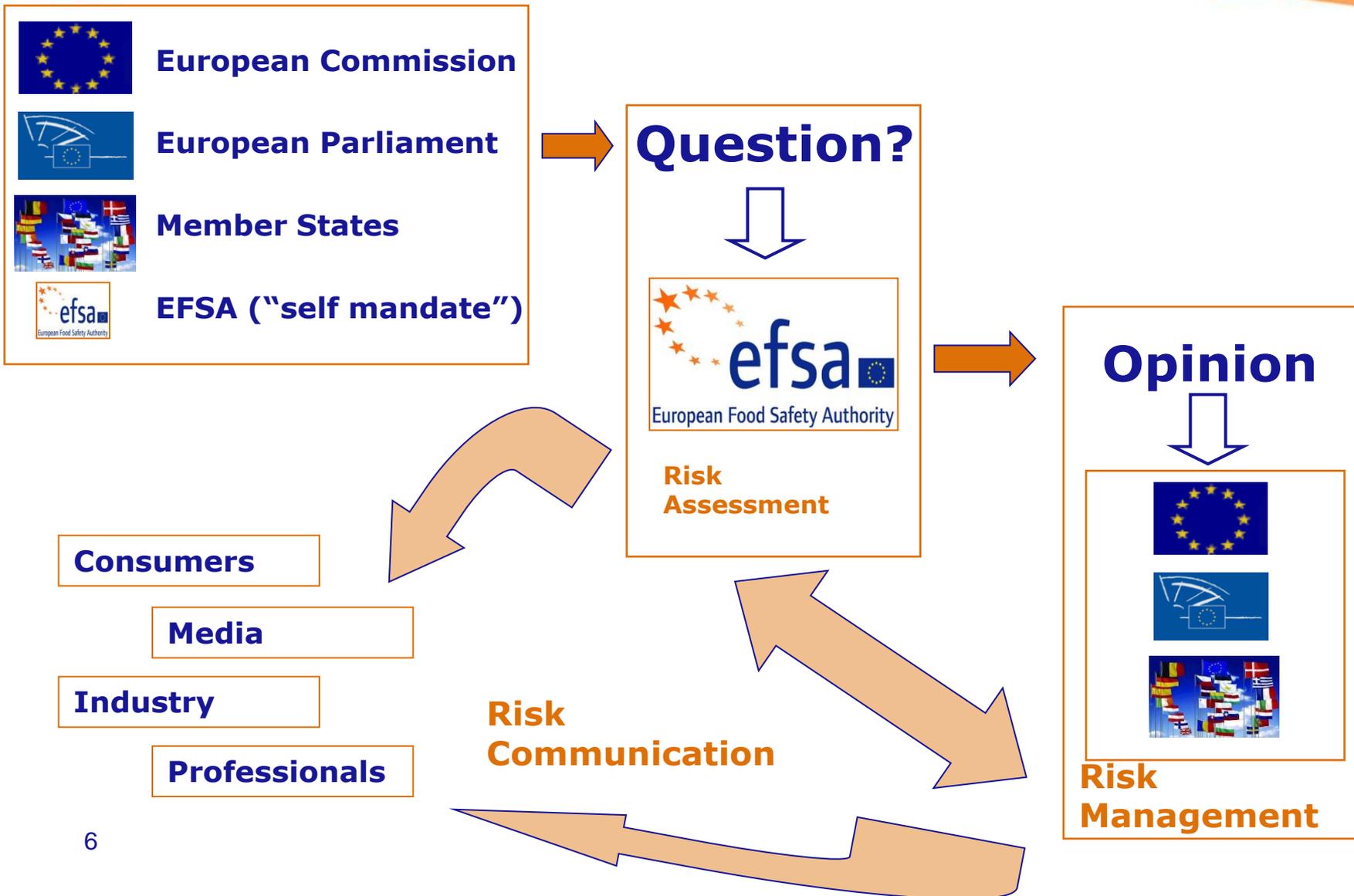


Dietary,
nutritional and
novel food



Food packaging

From "question" to "answer"





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**CONTRIBUTING TO THE
DEVELOPMENT OF STANDARDS
FOR ANIMAL WELFARE**

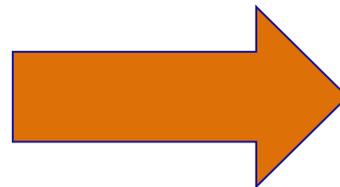
Where does animal welfare fit in?

- Assessing risks to the health and welfare of **animal populations** serves to protect our **health**, our environment and the economic benefit we derive from them
- Animal welfare as a **public good**
- The **Panel on Animal Health and Welfare (AHAW)** deals with all aspects of animal health and welfare primarily related to **food producing animals** at the **human-animal-environment interface**



Interface Animal Welfare/Animal Health/Food Safety

- The concept of animal welfare is not restricted to the **protection and well-being** of animals. Welfare of animals has an **overall impact** on the condition of the animals, including possible implications on animal health and food safety.
 - Tail biting in pigs as major welfare issue and risk factor for food safety (AHAW, 2007)
 - Infection with SBV and increased dystocic calving (AHAW, 2012)



Animal Welfare at EFSA

- While ethical, socio-economic, cultural and religious considerations are **clearly not part of EFSA's remit**, one should recognise that animal welfare is a **complex, multi-faceted** issue which includes ethical, socio-economic, cultural and religious dimensions
- 42 Scientific opinions on animal welfare adopted since 2004



Impact on EU legislation

AHAW Opinion	Legislation	Follow-up
<p>Transport and Animal Welfare (2004). Microclimate transport (2004) Welfare of animals during transport (2011)</p>	<p><u>Regulation 1/2005</u>, protection of the animals during transport</p>	<p>Commission Report on the protection of animals during transport (2011)</p>
<p>Stunning/killing of main commercial species (2004); Stunning/killing of minor species (2006)</p>	<p><u>Council Regulation (EC) 1099/2009</u> on the protection of animals at the time of killing</p>	<p>Recommendations on farmed fish are not included (seven opinions on S&K of farmed fish in 2009) Commission's study on welfare of farmed fish at killing</p>
<p>Welfare aspects of genetic selection of broilers and housing & management of broiler breeders (2 SOs + 3 tech reports in 2010)</p>	<p>Council Directive 2007/43/EC Art. 6: the Commission will submit a report to the European Parliament and to the Council; that report may be accompanied by appropriate legislative proposals, if necessary.</p>	

EFSA Scientific opinion on the welfare aspects of various systems of keeping laying hens (2005)

Recommendations:

“Housing systems should provide the possibility for hens to carry out activities which are behavioural priorities.”



Commission Report on the various systems of rearing laying hens in particular those covered by Directive 1999/74/EC

Some assessments

- Methods of Stunning and Killing of Fish
- Welfare of Dairy Cows
- Genetic Selection of Broilers
- Housing and Management of Broiler Breeders
- Practice of Harvesting Feathers on live geese
- Animal Welfare during Transport
- Guidance for Risk Assessment on Animal Welfare
- Guidance on Animal Health and Welfare aspects of GM-animals
- Use of animal based indicators for animal welfare (dairy cows, pigs and broilers)
- Electrical requirements for waterbath stunning equipments for poultry

The AHAW management plan aims at:

- *Fine-tuning the existing EU legislation (e.g. electrical requirements for waterbath stunning equipment in Regulation 1099/2009)*
- *Implementing the EU Strategy on the Protection and Welfare of Animals 2012-2015 (e.g. move towards a more flexible legislation based on welfare parameters to be measured on the animals)*

Opinion on waterbath stunning (2012)

Question:

“.....to recommend, if necessary, new electrical requirements applicable for waterbath stunning than the ones laid down in...Regulation (EC) No 1099/2009”

Conclusions:

“The aim of a stunning system is to achieve a 100% effective stunning. The most effective electrical parameters in present use can achieve an **effectiveness of up to 96%** as measured by EEG methods and 100%, reported as unconscious using non-EEG methods”

Recommendations:

“There is an urgent need **to develop** electrical methods that guarantee 100% stun”

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**PERFORMING ANIMAL WELFARE
RISK ASSESSMENT IN A GLOBAL
CONTEXT**

29/12/08

SCIENTIFIC OPINION

Guidance on Risk Assessment for Animal Welfare¹

EFSA Panel on Animal Health and Welfare (AHAW)^{2, 3}

European Food Safety Authority (EFSA), Parma, Italy

This opinion, published on 15 February, replaces the earlier version published on 25 January 2012⁴

ABSTRACT

The document provides methodological guidance to assess risks for animal welfare, considering the various husbandry systems, management procedures and the different animal welfare issues. The terminology for the risk assessment of animal welfare is described. Risk assessment should not be carried out unless the relevant welfare problem is clearly specified and formulated. The major components of the problem formulation are the description of the exposure scenario, the target population and the conceptual model linking the relevant factors of animal welfare concern. The formal risk assessment consists of exposure assessment, consequence characterisation, and risk characterisation. The systematic evaluation of the various aspects and components of the assessment procedure aims at ensuring its consistency. All assumptions used in problem formulation and risk assessment need to be clear. This also applies to uncertainty and variability in the various steps of the risk

Risk Managers

Risk Assessors

General Scientific Review or Update

Outbreaks or public/political concerns or Regulatory Framework

- What problems are associated with current conditions?
- If current conditions appear to pose a threat to animal welfare, what options exist for altering those conditions?

Problem Formulation

- Under the given decision context, what risk and other technical assessments are necessary to evaluate the possible risk management options?

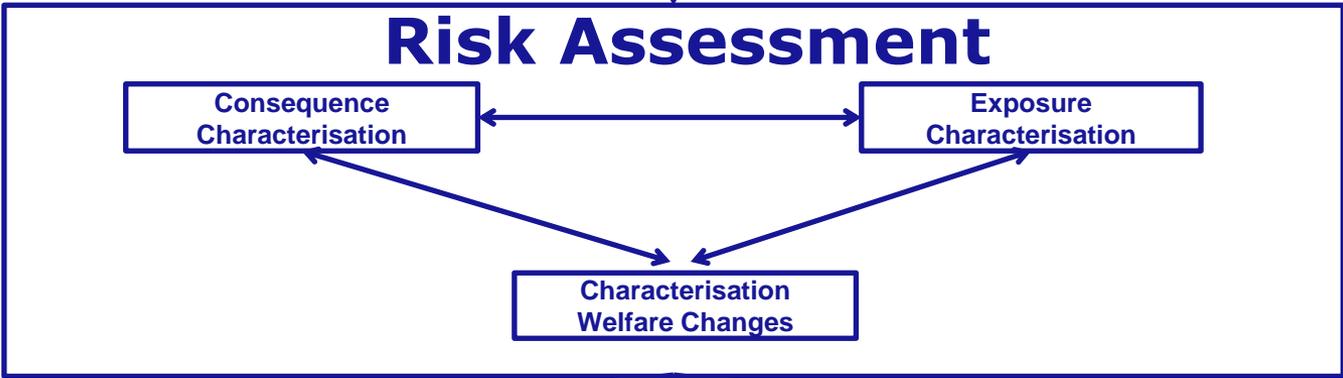
Data Need & Availability

Target population, Exposure scenarios, Welfare consequences, conceptual model

Factor Identification

- The process of planning a RA and ensuring its level of complexity should be consistent with the need to inform decision makers.

- What are the necessary welfare factors to assess the existing scenarios?
- What are the risk effects of the proposed options?
- What are the levels of uncertainty and variability?



Qualitative assessment

Semi-quantitative assessment

Quantitative assessment

- The quality of risk assessment depends on the **appropriate formulation of questions** for risk assessment, **clear understanding** of their **background**, best use of **scientific data** and **expert opinion**, and advanced **risk assessment methodology** applied to address the question at hand



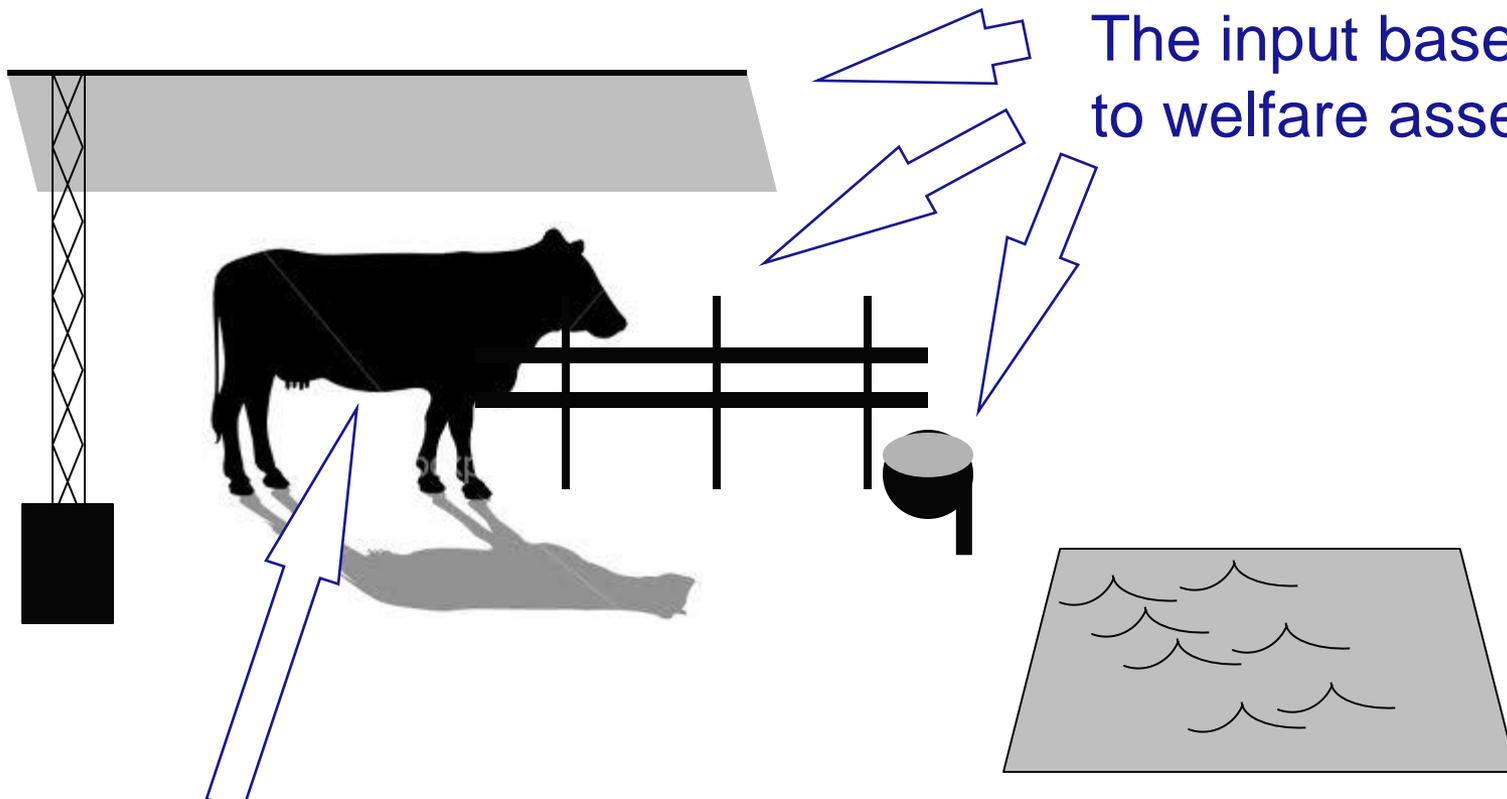


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**PROMOTING OUTCOME-BASED
MEASURES FOR ANIMAL WELFARE**

Animal-based measures (ABMs)

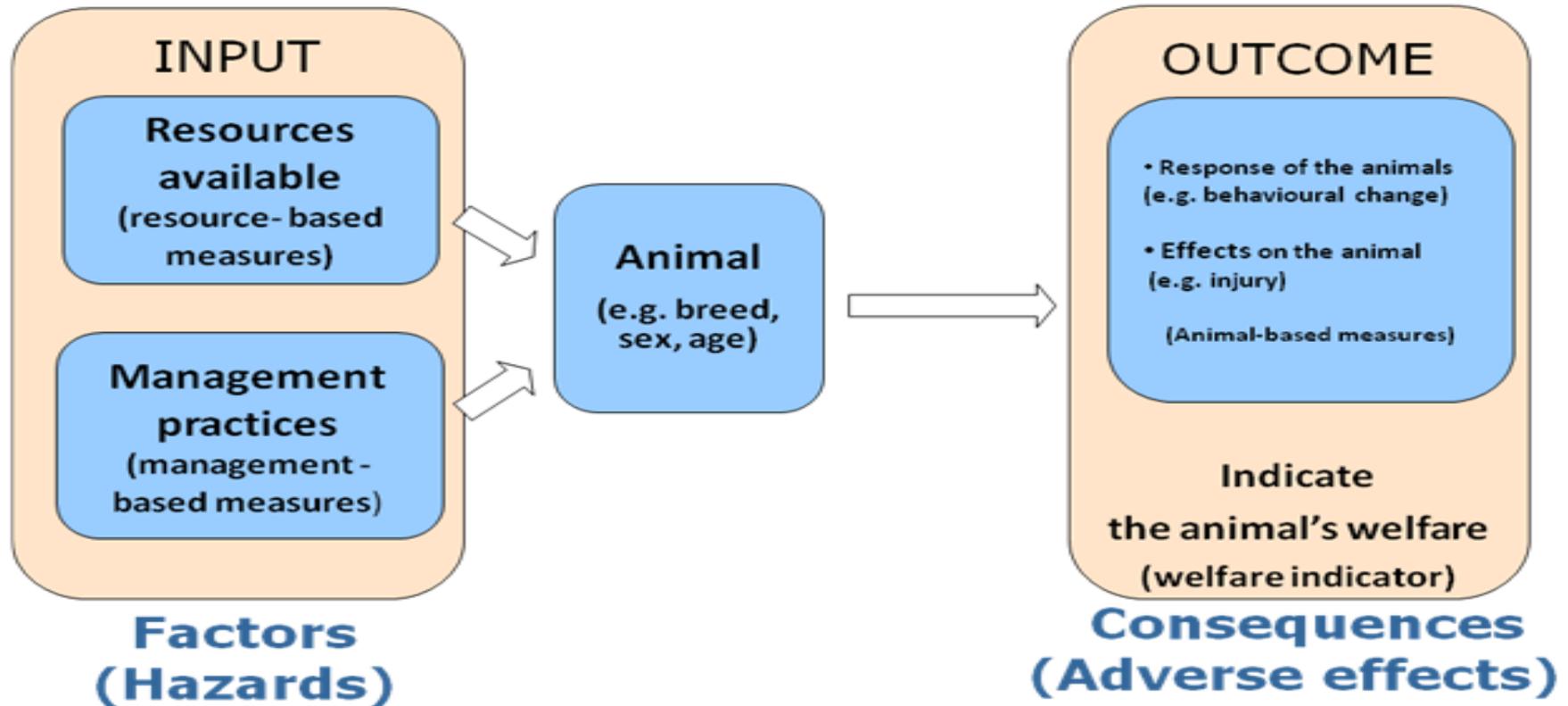
The input based approach
to welfare assessment



The outcome based approach
to welfare assessment

- How suggested assessment protocols cover the main hazards identified in EFSA scientific opinions
- How ABMs could be used to ensure the fulfilment of the EFSA recommendations
- Which relevant animal welfare issues cannot be assessed using ABMs and what kind of alternative solutions are available to improve the situation
- Main factors in the various husbandry systems which have been scientifically proven to have negative effects on the welfare of animals

ABMs: the shift



Risk assessment focuses on hazards
Make recommendations to reduce risk

Welfare assessment focuses on outcomes
Compares outcomes in different situations

SCIENTIFIC OPINION

Statement on the use of animal-based measures to assess the welfare of animals¹

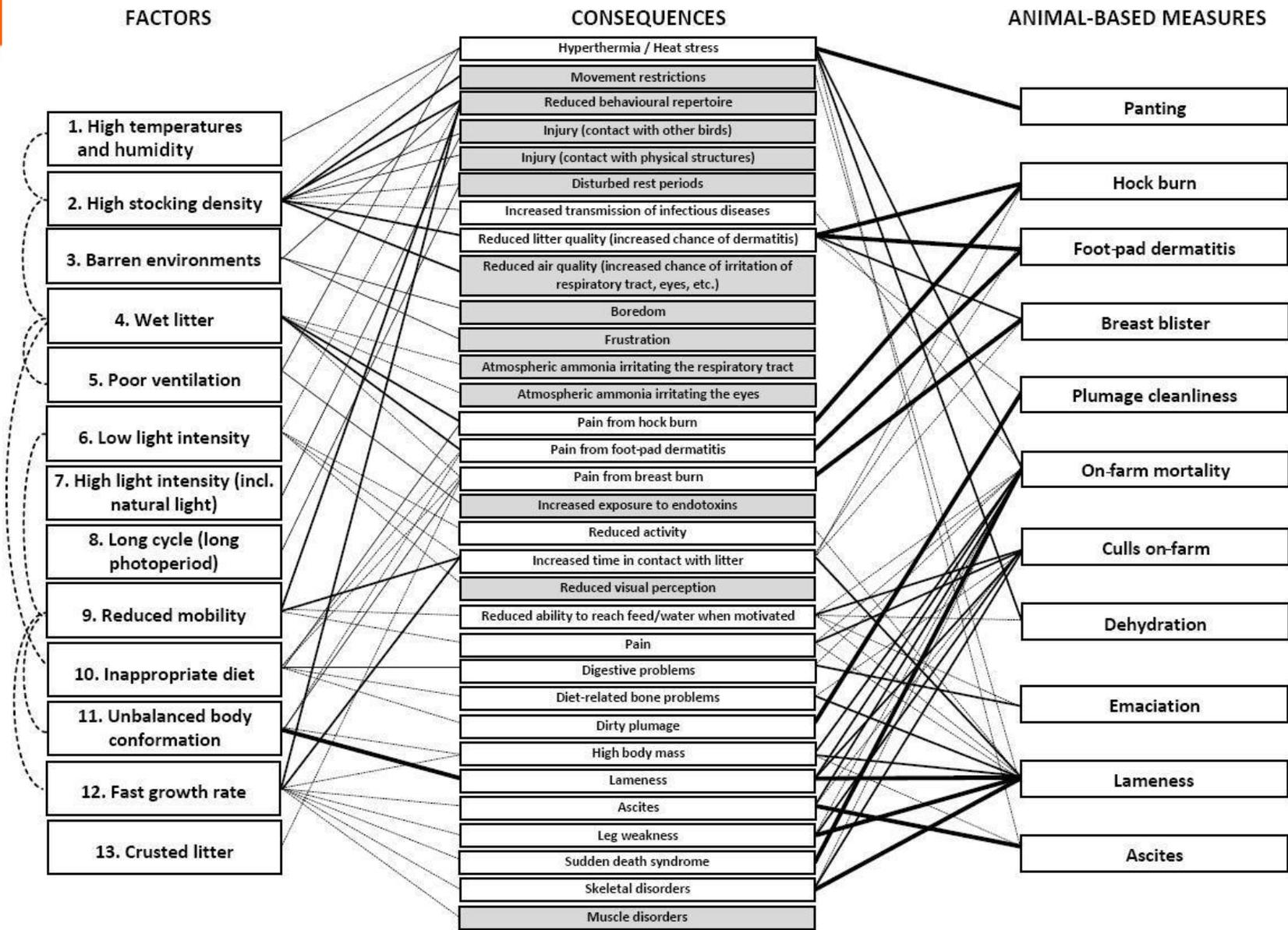
EFSA Panel on Animal Health and Welfare (AHAW)^{2, 3}

European Food Safety Authority (EFSA), Parma, Italy

ABSTRACT

The overall aim of the work outlined in this statement is to help establish a common framework for future scientific opinions dealing with the use of animal-based measures to assess the welfare of animals. The statement is mainly intended to support the work of EFSA, and a list of considerations

Specificity and sensitivity (broilers)



EFSA Technical meeting on the use of animal-based measures for the welfare of dairy cows, pigs and broilers (4-5 July 2012)

- Moving forward **quantitative risk assessment** of the welfare of food producing animals and provide risk assessors with validated tools to flag and quantify main animal welfare issues
- Focusing on ABMs for which data sources are already available in the field
- Need to work on the definition, **fitness for purpose** and **validation** of the measures, and consequently on the identification of the most robust and recordable **combinations** of ABMs

<http://www.efsa.europa.eu/en/supporting/doc/341e.pdf>

Call for proposals - Identification, validation and collection of data on animal-based measures to create a database for quantitative assessment of the welfare of dairy cows

EFSA calls for a proof of concept on the use of animal-based measures to assess the welfare of animals, based on a pilot project and involving several EU Member States, to collect robust and validated ABMs on dairy cows

<http://www.efsa.europa.eu/en/art36grants/article36/cfpefsaahaw201201.htm>

Commission request for a Scientific opinion on monitoring procedures at slaughterhouses

- Identification of indicators of effective stunning and killing
- Identification of monitoring procedures' elements

Take home message

EFSA

- In the European food safety system, **risk assessment** (RA) is done independently from risk management
- EFSA deals with complex, **multi-faceted questions** of animal health and animal welfare, primarily related to – but not restricted to - food producing animals, at the human-animal ecosystems interfaces
- Risk assessment provides the **scientific ground** for the identification of management options, usually reflected in the EU legislation
- EFSA is also responsible for **developing methodological guidance** on risk assessment which can be applied globally

Integration of RA and ABMs

- **Robust methodological framework** for risk assessment in animal welfare is a long haul of the AHAW Panel, ensuring sustainability of standards in a global context
- **Harmonised definition** and validation of ABMs are needed
- Systematic collection of standardised field data on ABMs and storage in defined databases could assist in assessing **validity** and **robustness** of ABMs
- **ABMs** could be used in welfare surveillance systems at the European level, allowing for **future quantitative risk assessments**

Thank you for your attention



The screenshot shows the EFSA website interface. At the top right, there are language selection buttons for 'de', 'en', 'fr', and 'it'. Below the EFSA logo and tagline, there is a search bar with a 'Go' button. A navigation menu includes 'About EFSA', 'News & events', 'Topics A-Z' (highlighted), 'Publications', 'Panels & units', 'Cooperation', 'Applications helpdesk', and 'Calls & consultations'. The breadcrumb trail reads 'Home > Topics A-Z > Animal Welfare'. On the left, a sidebar lists 'Animal Welfare' and 'Fish Welfare'. The main content area features a video titled 'Animal welfare: animal-based indicators' with a play button overlay. To the right of the video is a 'See also' section with links to 'Panel on Animal Health and Welfare (AHAW)', 'Panel on Biological Hazards (BIOHAZ)', 'Animal Health homepage', 'Cloning homepage', and 'Feed homepage'. The text on the page discusses the importance of animal welfare for food safety, mentioning stress factors and diseases like Salmonella, Campylobacter, and E. coli.



European Food Safety Authority

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Home > Topics A-Z > Animal Welfare

Print

Animal Welfare

Fish Welfare

Animal Welfare

Animal welfare is an important part of EFSA's remit. The safety of the food chain is indirectly affected by the welfare of animals, particularly those farmed for food production, due to the close links between animal welfare, animal health and food-borne diseases. Stress factors and poor welfare can lead to increased susceptibility to disease among animals. This can pose risks to consumers, for example through common food-borne infections like Salmonella, Campylobacter and E.Coli.

The welfare of food producing animals depends largely on how they are managed by humans. A range of factors can impact on their welfare including housing and bedding, space and crowding, transport conditions, stunning and slaughter methods, castration of males and tail docking

Animal welfare: animal-based indicators



See also

- ▶ Panel on Animal Health and Welfare (AHAW)
- ▶ Panel on Biological Hazards (BIOHAZ)
- ▶ Animal Health homepage
- ▶ Cloning homepage
- ▶ Feed homepage