



Universidad
Politécnica
de Cartagena



SITUACIÓN ACTUAL DE LA SEGURIDAD ALIMENTARIA A NIVEL EUROPEO: GESTIÓN DE RIESGOS MICROBIOLÓGICOS

Prof. Pablo Fernández Escámez

Universidad Politécnica de Cartagena

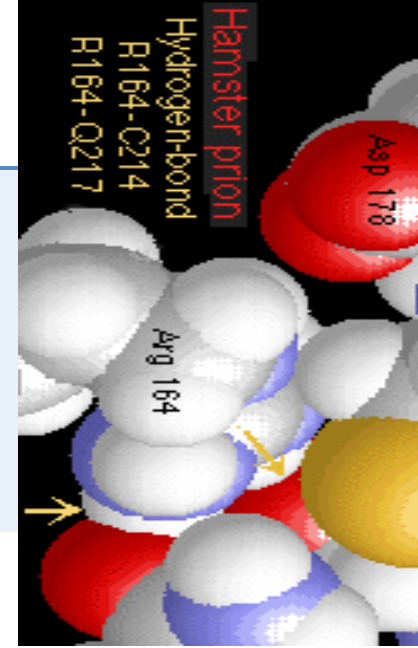
Biological Hazards Panel Expert, EFSA



COMISION DE LAS COMUNIDADES
EUROPEAS

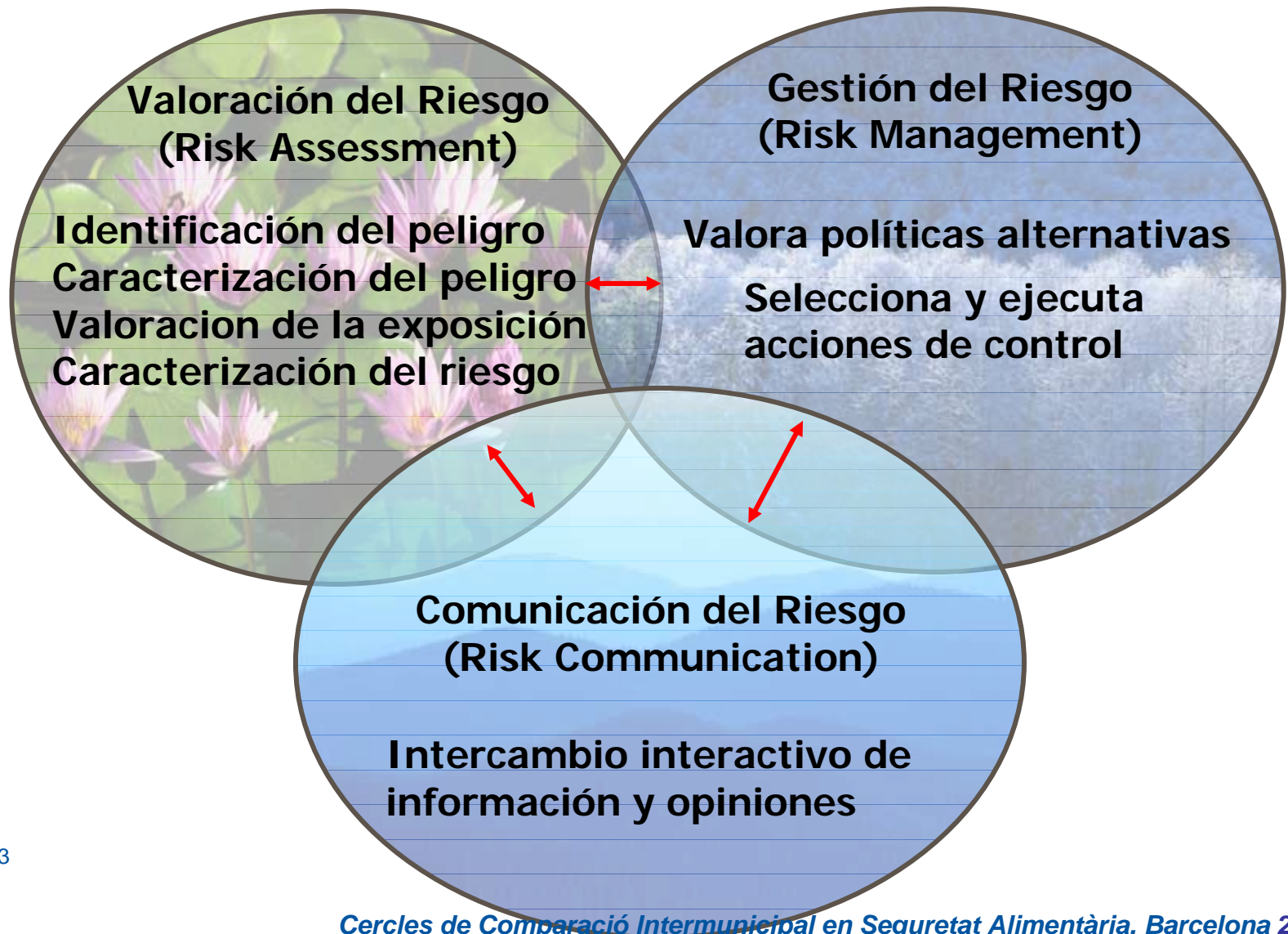
Bruselas, 12 Enero 2000

LIBRO BLANCO SOBRE SEGURIDAD
ALIMENTARIA



Risk analysis must form the foundation on which food safety policy is based. The EU must base its food policy on the application of the three components of risk analysis: **risk assessment** (asesoramiento científico y análisis de la información) **risk management** (regulación y control) and **risk communication**.

Componentes esenciales del Análisis de Riesgos





La Comisión Europea crea la **Autoridad Europea en Seguridad Alimentaria (EFSA)** como organismo asesor en Seguridad Alimentaria en 2002.

Sede actual: **Parma (Italia)**.

La Comisión tiene que consultar a la EFSA los temas relacionados con inocuidad alimentaria.



 **efsa**
European Food Safety Authority

EFSA's Mission and Tasks

The authority shall provide **scientific advice, scientific and technical support** for the Community's legislation and policies in all fields which have a direct or indirect impact on food and feed safety including nutrition, plant health and animal health/welfare...



...to provide that support we need: reach **scientific excellence**, be **independent** and **transparent**, **communicate** the risks assessed.

EFSA and the EU Food Safety Risk Analysis framework



EFSA and the EU Food Safety Risk Analysis framework

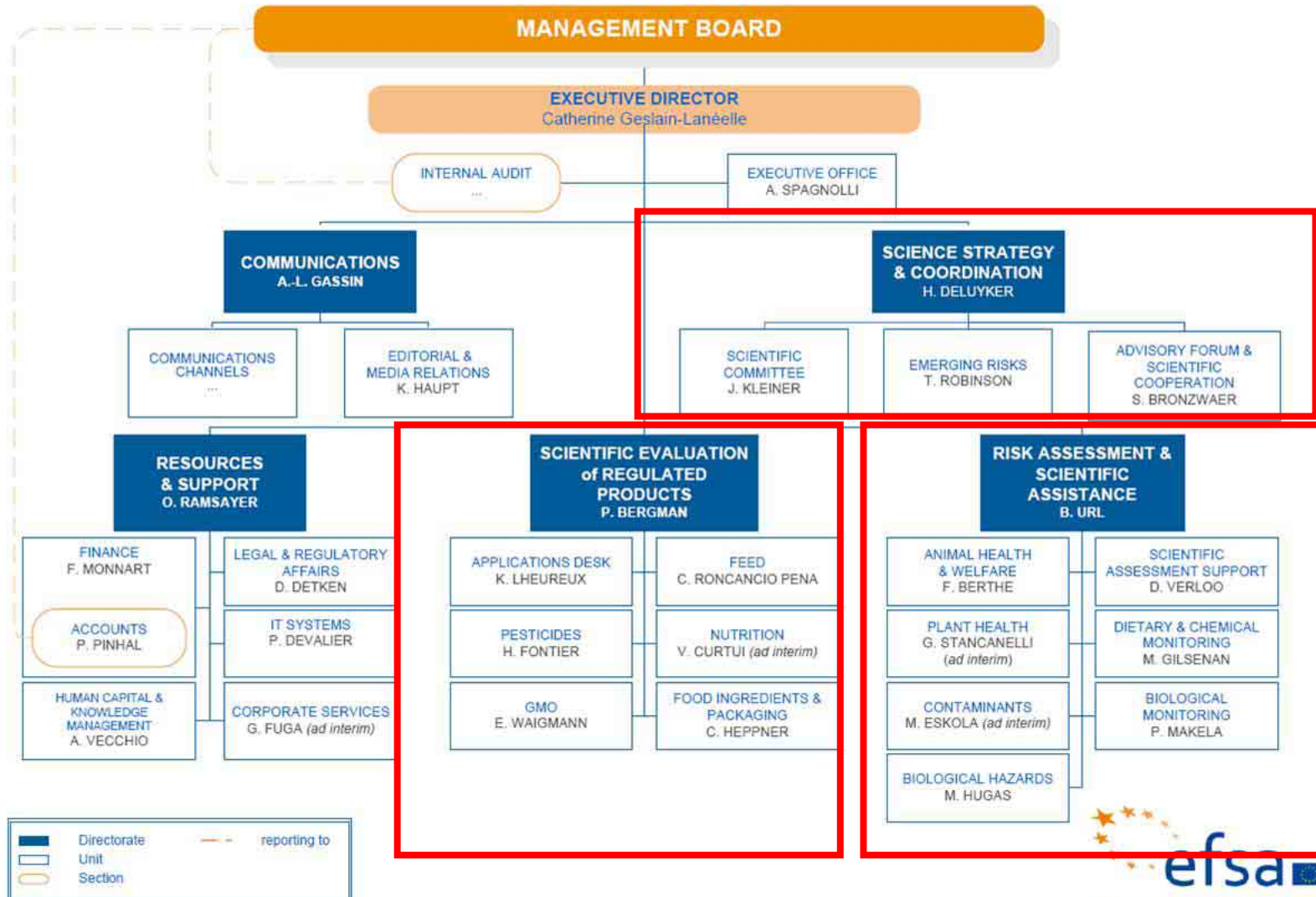


Papel de EFSA en comunicación de Riesgo

- * **Independencia del proceso político**
- * **Apertura y Transparencia**
- * **Coordinación con las autoridades nacionales**
- * **Soporte a la Comisión en: 'Alarmas'**

Where is science?

Organisational Structure on 16/04/2013



Four risk assessment work themes

- General requests for scientific opinions and advice
- Risk assessment of regulated substances and products
- Monitoring and assessing specific biological risk factors for human health and animal health
- Improving European risk assessment approaches and methodologies

Scientific Panels

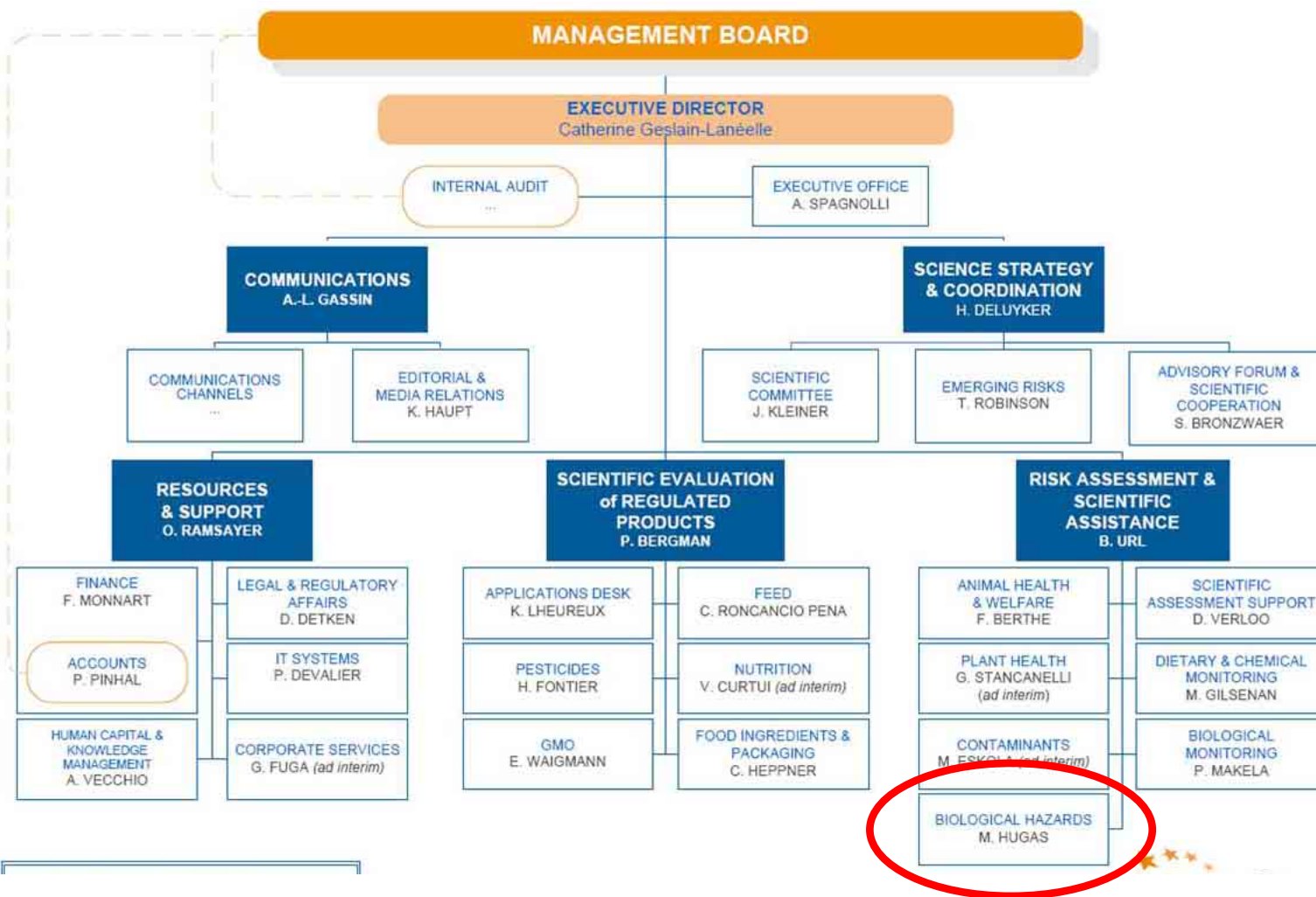
Scientific Panels (10)



- Placed under 2 different Directorates (REPRO & RASA)
- Cover whole food and feed chain
- Members appointed by Management Board following open call for applications
- Chairs and members appointed for three years renewable period
- Selected on basis of proven scientific excellence in relevant fields for the Panel
- Geographical and gender balance into account
- Maximum 21 members per panel

Scientific Panels

Example: BIOHAZ Panel



Scientific Panels

Example: BIOHAZ Panel



Mandate:

Deals with questions on biological hazards relating to human health and food safety, including:

- Food-borne diseases;
- Food-borne zoonoses;
- Transmissible spongiform encephalopathies (e.g. BSE);
- Microbiology;
- Food hygiene;
- Animal By-Products and associated waste management.

Scientific Committee

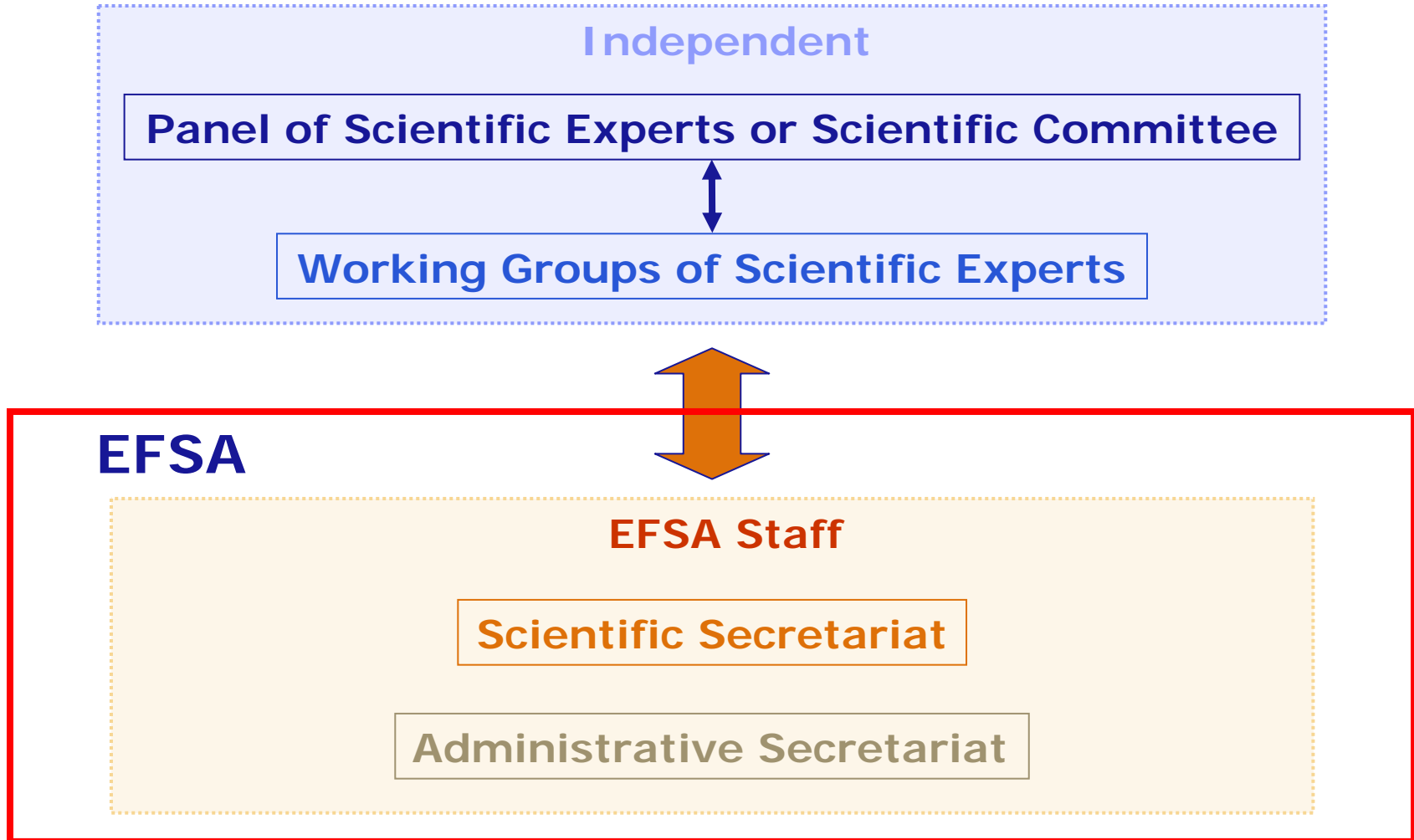


efsam efsam

How are supported the Experts of the Panels/Scientific Committee?

Support to Panels/SC Experts

Through EFSA Units



How an EFSA Opinion is produced

(from “question” to “answer”)

From "question" to "answer"



European Commission



European Parliament



Member States



EFSA ("self mandate")

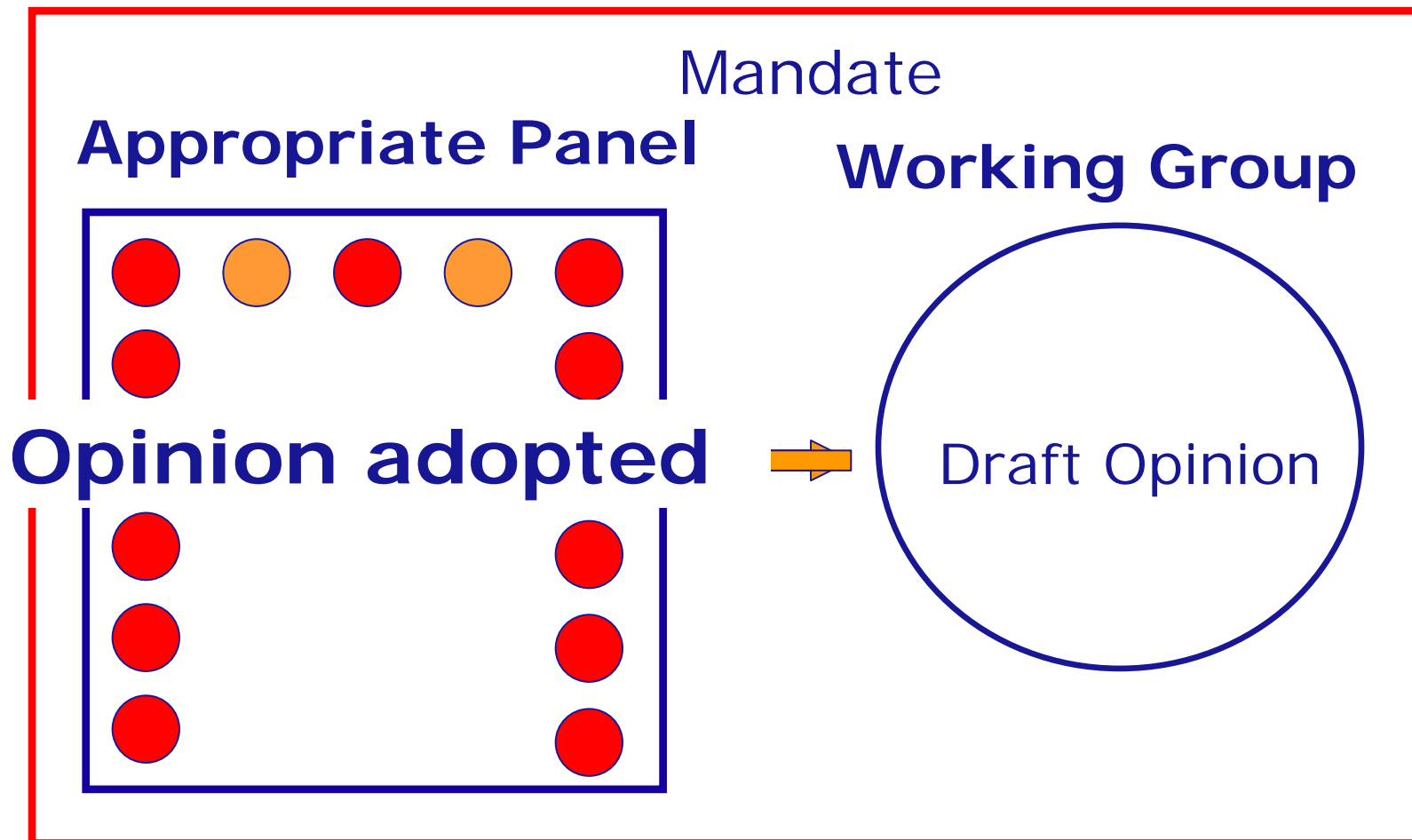


Question?

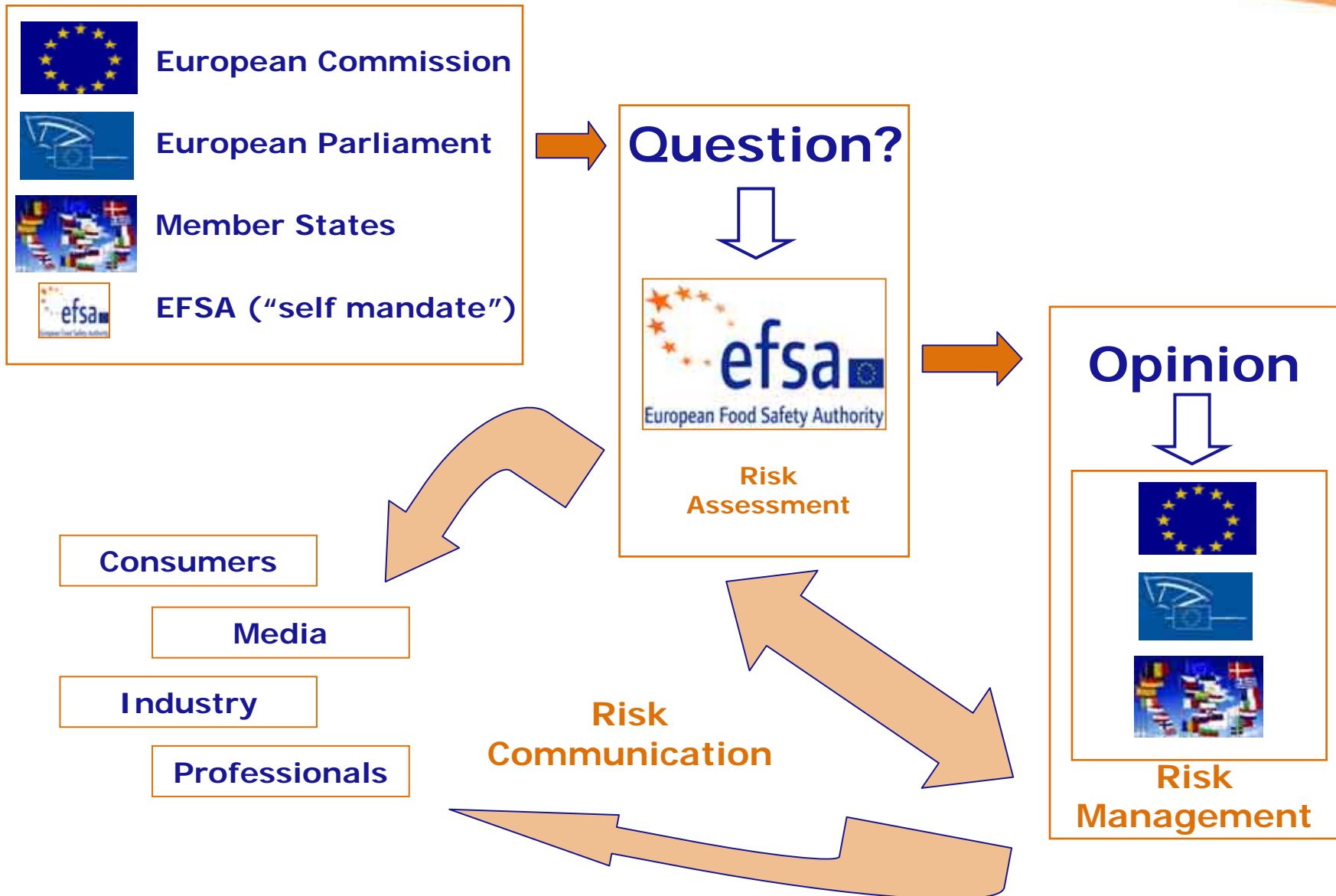


Risk
Assessment

From "question" to "answer"



From "question" to "answer"

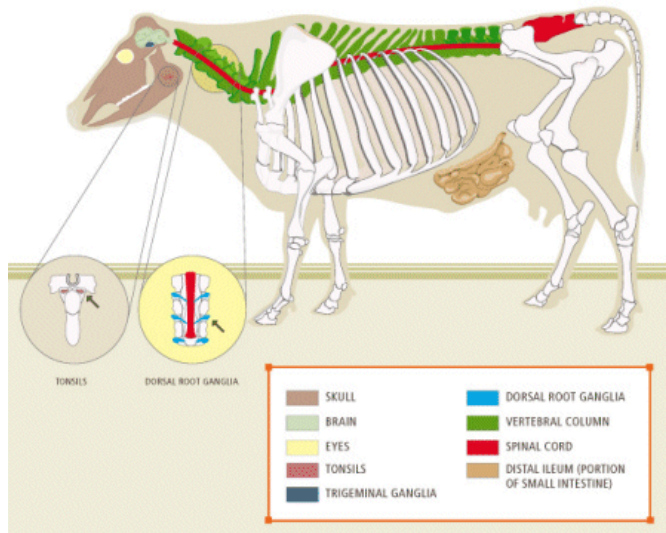


How Risk Assessments are used in practical terms

**(from “Risk Assessment” to “Risk
Management”)**

From "Risk Assessment" to "Risk Management" ^{1/2}

Vertebral column as Specified Risk Material



2001 – Bovines over 12 months.

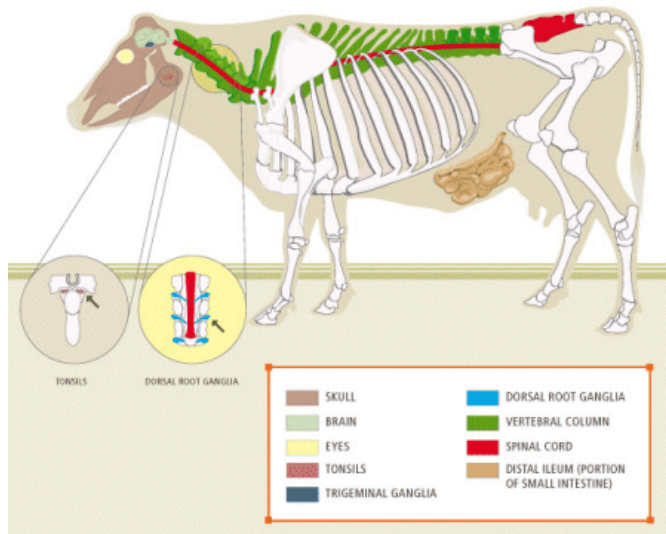
October 2004 – EC "question" to EFSA: *Review age limit for removal certain bovine tissues as SRM, taken into account OIE report.*

April 2005 – EFSA Scientific Opinion on the *Assessment of the age limit in cattle for removal of certain specified risk materials (SRM).*

January 2006 – Reg. (EC) 1974/2005 amending Reg. (EC) 999/2001 **Bovines over 24 months**

From "Risk Assessment" to "Risk Management" ^{2/2}

Vertebral column as Specified Risk Material



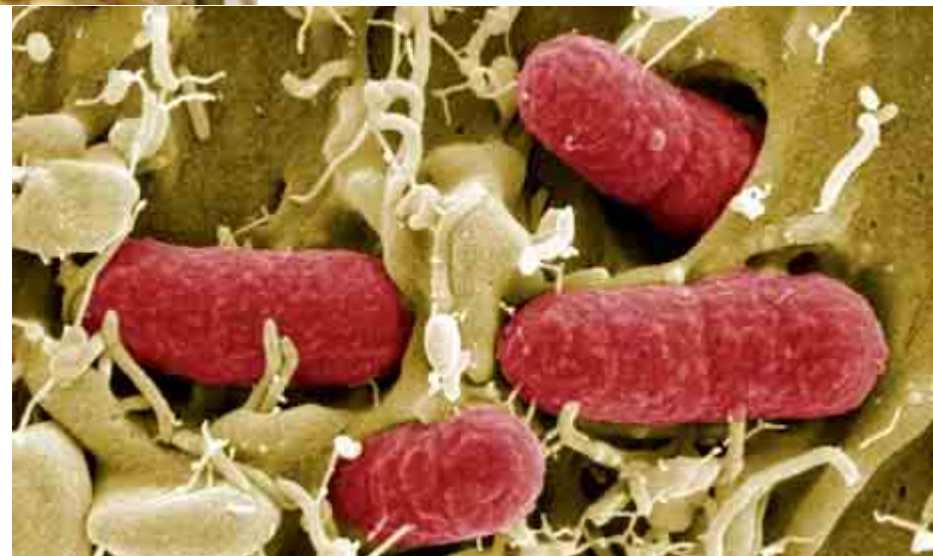
January 2006 – EC "question" to EFSA: Assessment of the likelihood of the infectivity in SRM derived from infected cattle at different age groups estimated by a back calculation modelling.

April 2007 – EFSA Scientific Opinion on the Assessment of the likelihood of the infectivity in SRM derived from cattle at different age groups estimated by back calculation modelling.

April 2008 – Reg. (EC) 357/2008 amending Reg. (EC) 999/2001 **Bovines over 30 months of age**



Ejemplo: foods of non-animal origin





Ejemplo: foods of non-animal origin

TERMS OF REFERENCE AS PROVIDED BY.... (EC).

1. To compare the incidence of food-borne human cases linked to food of non-animal origin and food-borne cases linked to food of animal origin. This ToR should provide an indication of the proportionality between these two groups as regard humans cases and, if possible, human burden.

2. To identify and rank specific food/pathogen combinations most often associated to human cases originating from food of non-animal origin in the EU.

La respuesta se basa en conocimiento científico publicado



Resultado: Scientific opinion

Scientific Opinion on the risk posed by pathogens in food of non-animal origin.

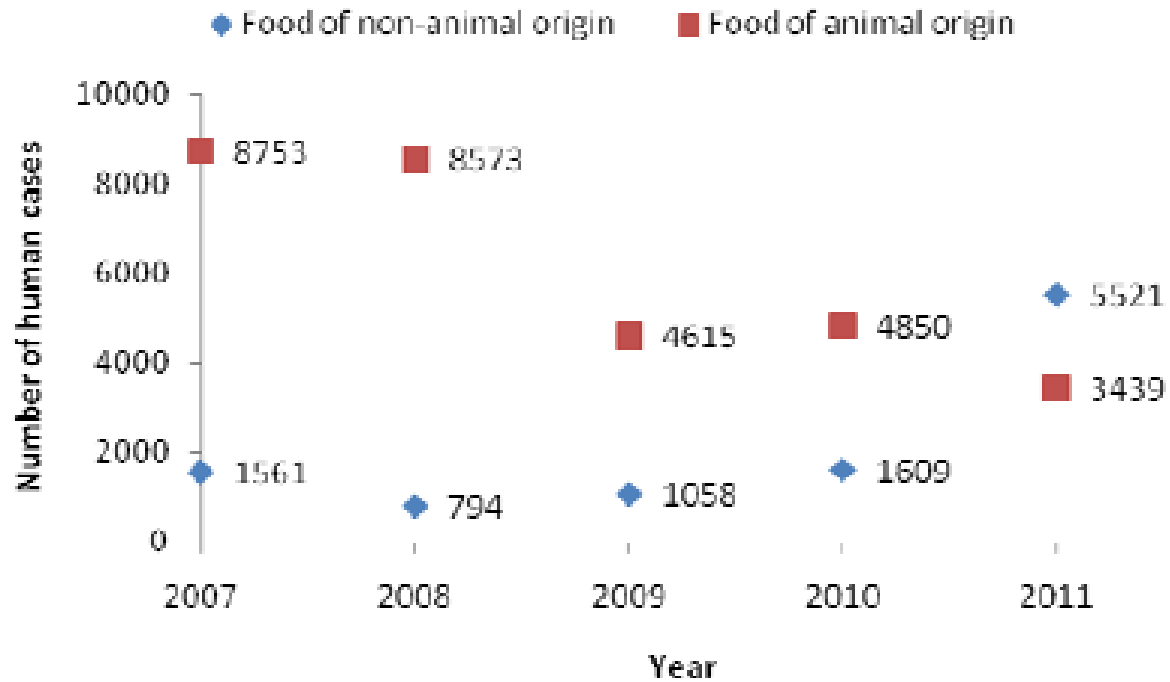
<http://www.efsa.europa.eu/en/efsajournal/pub/3025.htm>

EFSA Risk Communication

- 1) Servicio de referencia en toda la Unión Europea via WEB, transparencia
- 2) Anuncios públicos de temas de interés en toda la UE precisos y a tiempo
- 3) Estrecha coordinación con los Estados miembros, ECDC, etc. en los comunicados

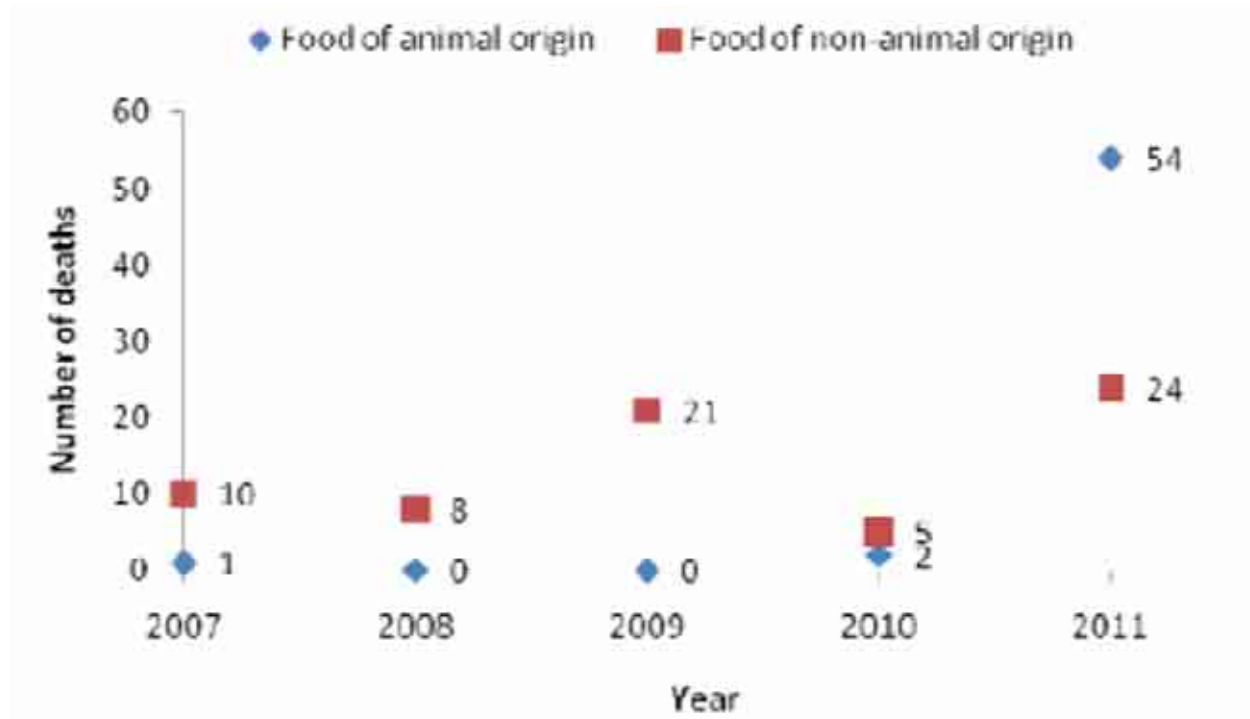


FNAO: casos de enfermedad alimentaria





FNAO: muertes por causa alimentaria





Asociación de enfermedad-productos

Ranking position	Pathogen	FoNAO category
First	<i>Salmonella</i>	Leafy greens eaten raw as salads
	<i>Salmonella</i>	Bulb and stem vegetables
Second	<i>Salmonella</i>	Tomatoes
	<i>Salmonella</i>	Melons
	Pathogenic <i>E. coli</i>	Fresh pods, legumes and grains
	Norovirus	Leafy greens eaten raw as salads
Third	<i>Salmonella</i>	Nuts and nut products
	<i>Salmonella</i>	Sprouted seeds
	<i>Shigella</i>	Fresh pods, legumes or grains

Risk raking of commodities- specific pathogen



- *Salmonella* and leafy greens eaten raw as salads;
- *Salmonella* and bulb and stem vegetables; *Salmonella* and tomatoes; *Salmonella* and melons; and pathogenic *E. coli* and fresh pods, legumes or grain;
- norovirus and leafy greens eaten raw as salads; *Salmonella* and nuts and nut products; *Salmonella* and sprouted seeds; and *Shigella* and fresh pods, legumes or grains;
- *Bacillus* and spices and dry powdered herbs; norovirus and bulb and stem vegetables; norovirus and raspberries; *Salmonella* and raspberries; *Salmonella* and spices and dry powdered herbs, *Salmonella* and mixed fresh-cut salad leaves; *Shigella* and fresh herbs, pathogenic *E. coli* and sprouted seeds; and *Yersinia* and carrots;
- norovirus and tomatoes; norovirus and carrots; and *Shigella* and carrots.



Consecuencias de las opiniones

Se trasladan al solicitante (Comisión europea, Estado miembro, empresa....)

Legislación europea
(Comisión Europea)

Estado UE
u otro país

Empresas

Empleo de á. láctico
para higienización

Modificación de
muestreos, etc.

Incorporación de
Nuevos comps.



Gracias por vuestra atención