



# Options for control of main risks identified in EFSA opinion

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# Purpose of this presentation

- Ways forward in order to obtain a more risk-based “meat inspection” in pigs based
- Provide input for the discussion this afternoon

# Main risks identified in pigs

- High risk: *Salmonella* spp.
- Medium risk:
  - *Yersinia enterocolitica*,
  - *Toxoplasma gondii*,
  - *Trichinella* spp.
- Others: low relevance



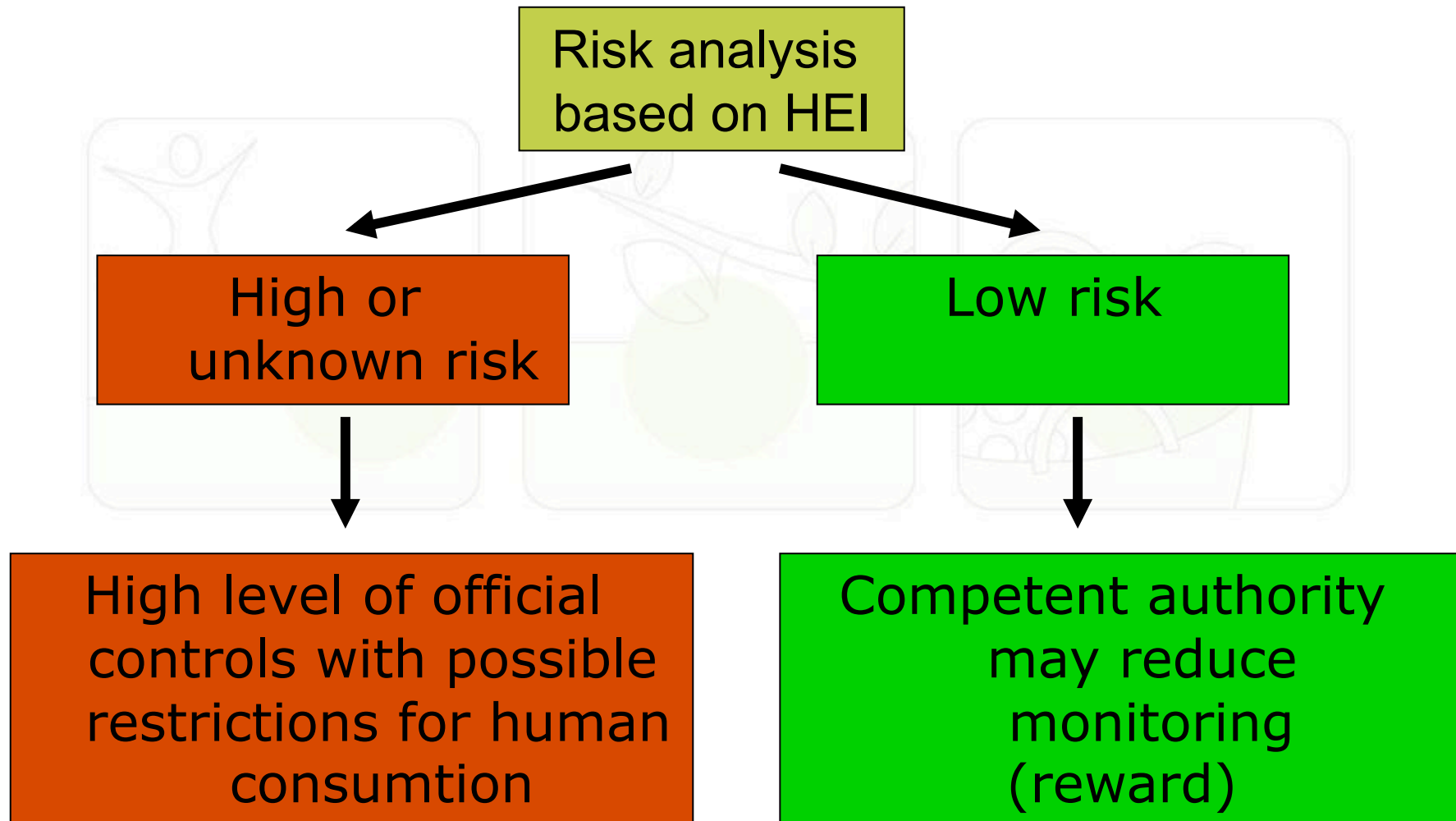
## Developing a risk-based meat inspection, considering:

- The EFSA opinion including harmonised epidemiological indicators
- The 2011 questionnaire on review of meat inspection
- Conclusions of previous Round table Conferences
- The 2009 Hygiene Package evaluation

# Harmonised Epidemiological Indicators (HEI)

- The epidemiological information to be used for the risk analysis
- Examples *Salmonella*: Prevalence based on
  - faeces samples on farm
  - carcass swabs in slaughterhouse
  - serological tests
- Examples *Trichinella*:
  - conditions for controlled housing on farms
  - digestion tests in slaughterhouse

# Potential general approach





# HEI *Salmonella*

Table 14: Proposed harmonised epidemiological indicators for pigs

Indicators (animal/ food category/other)	Food chain stage	Analytical /diagnostic method	Specimen
<i>Salmonella</i>			
HEI 1 <i>Salmonella</i> in breeding pigs	Farm	Microbiology (detection and serotyping)	Pooled faeces sample
HEI 2 <i>Salmonella</i> in fattening pigs prior to slaughter	Farm	Microbiology (detection and serotyping)	Pooled faeces sample
HEI 6 <i>Salmonella</i> in fattening pigs – carcasses after slaughter process before chilling	Slaughterhouse	Microbiology (detection and serotyping)	Carcase swabs



# Developing a risk-based meat inspection for *Salmonella* (1)

- Proposed HEI: (herd) prevalence based on *Salmonella* process hygiene criterion on carcasses
- Maintain existing criterion:
  - 5 pig carcasses a week (n=50 over 10 weeks)
  - In case of more than 10% positives (c=5), improvements are required to slaughter hygiene, process controls, origin of pigs and biosecurity of the farm of origin
- But enhanced and herd-based sampling
  - Increase of sample frequency e.g. from 5 to 50 samples a week with registration of herd of origin
  - When the sampling results are < 10% positives (at herd level, build up historically) the sampling frequency can be reduced for that herd or sampling can be targeted towards other herds





## Developing a risk-based meat inspection for *Salmonella* (2)

- Optimal use of Food Chain Information:
  - Informing the herd on outcome carcass sampling to build up a herd status
  - Informing the slaughterhouse on the herd status
- Consideration of alternative equivalent monitoring at herds:
  - Faecal samples
  - Serology
- Sampling cost may create incentive



## Developing a risk-based meat inspection for *Salmonella* (3)

- Responsibility and supervision by Competent authorities
- Additional measures
  - Separate slaughter of low risk herds
  - Specific slaughter procedures for high risk/unknown risk herds
  - Decontamination of all pigs when risk is high/unknown
  - Deletion of routine palpation and incision

# HEI *Trichinella*

<u><i>Trichinella</i></u>			
HEI 1 <i>Trichinella</i> in free-range and backyard pigs (both fattening and breeding pigs)	Slaughterhouse	Digestion	Meat
HEI 2 <i>Trichinella</i> in pigs from non-officially recognised controlled housing conditions (both fattening and breeding pigs)	Slaughterhouse	Digestion	Meat
HEI 3 Farms with officially recognised controlled housing conditions and <i>Trichinella</i> free status	Farm	Auditing	Not applicable

# Developing a risk-based meat inspection for *Trichinella*

- Defining low risk based on prevalence in
  - herd/compartment and application of controlled housing conditions, or
  - Country including wildlife
- Low risk: CA may decide
  - to reduce testing or control of fattening pigs (from controlled housing farms)
  - Keep testing of sentinel animals
- High/unknown risk: systematic testing or treatment

# Developing a risk-based meat inspection for *Trichinella*

- The need for a revision of Regulation (EC) No 2075/2005 may be considered
- Agreement needed in international context on HEI:
  - OIE guidelines: pre-harvest conditions
  - Codex guidance: linking to post-harvest testing or control

# Developing a risk-based meat inspection for *Yersinia*

- Lack of monitoring data e.g.
  - Only 7 MS reported sampling in pork
  - Only 4 MS reported sampling in pigs
- HEI?
- Similar pork safety assurance measures as *Salmonella*
- Priority of *Salmonella* control may be considered

## Developing a risk-based meat inspection for *Toxoplasma*

- Limited information on human cases and importance of different sources (pork compared to small ruminants and cats)
- No practical tests available for control at slaughter
- Screening of herds by serology is an option to differentiate high and low risk herds:  
Infected herds: freezing
- Infection of herds linked to on-farm situations similar to *Trichinella* (outdoor access, biosecurity, rodent control, exclusion of cats)

# Summary

- High risk *Salmonella*
- Tools are available to differentiate high and low risk based on HEI for *Salmonella* and *Trichinella*
- A risk-based meat inspection / control is possible for these two hazards
- Additional monitoring data and effect of *Salmonella/Trichinella* approach on *Toxoplasma* and *Yersinia* by pork may be considered before considering specific controls



## This afternoon:

### Three panel discussions:

- Bacteriological risks (*Salmonella* and *Yersinia*) in pig meat inspection
- Parasitological risks (*Trichinella* and *Toxoplasma*) in pig meat inspection
- Consequences of the options for Tuberculosis and Brucellosis control



**THANK YOU FOR YOUR ATTENTION  
AND ENJOY YOUR LUNCH**