



FOOD GROUP

# Improvement of Supply Chain Inspection in pigs

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- \* VION: Director Quality Assurance
- \* Wageningen University: Supply-Chain Management in Animal Production





## Structure

ZLTO / NCB Ontwikkeling

ZLTO is a Farmers Union with approximately 18.000 members

Supervisory Board

VION Executive Board

FOOD INGREDIENTS

Fresh pork, beef, poultry and lamb and convenience food

functional proteins, fat, gelatine, energy

27.000 employees € 9 billion turnover

NL

DE

UK

Int.



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# Market orientation

The Customer and Consumer at the heart of the business

VION Ingredients

VION Food



Purina PetCare



SHIONOGI & CO., LTD.



HARIBO



METRO Group



M MORRISONS



Sainsbury's



ASDA





## VION's strategy as producers of consumer goods

- Control the supply chain: food safety, ethics, animal welfare, healthy food, ..
  - Full tracking and tracing
  - Certification through the supply chain
  - Being in the lead:
    - Corrective
    - Preventive
    - Pre-cautionary measures
  - Empowered to respond to questions of:
    - Consumers
    - Authorities
    - NGO's
  - 100% compliant (QA and QC)
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## Responsibility of (supply chain of) producers

- Design of systems
- Development of procedures
- Monitoring and verification
- Evaluation and development of performance standards
- Realistic compliance standards

**Result: private HACCP system + Supply Chain Meat Inspection  
(developed in partnership with CA)**

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## Producers: Design of Q-systems

- HACCP (content)
    - Hazard analysis
      - Own scientific knowledge
      - Literature
      - Scientific advice of public institutes
      - Continuously updated, according to the scientific state of the art
    - Process control plan
      - Translation of hazard analysis into process control plan!
  - e.g. ISO-9001 (management)
    - Quality control only possible with a well defined management structure
    - Tasks < > responsibilities < > competences
  - At Farm: equivalent to GlobalGAP
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## Producers: Trend analysis, performance and compliance standards

- Trend analysis on e.g.:
    - Microbiological data / criteria
    - CCP's monitoring
    - Customer complaints
  
  - Define and enforce internal performance standards
  
  - Compliance, define:
    - Procedures
    - Microbiological, chemical and other criteria
  
    - Procedures concerning compliance measurement
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## Supply Chain Inspection: developed by CA and VION

- Only pigs originating from an integrated production system
  - Food Chain Information available prior to slaughter
  - Low or neutral Risk Profile for *Mycobacterium avium* of the Farm
  - Risk based monitoring on residues of antibiotics
  - No incisions and no palpation at pm inspection
  - All pigs and herds off-specification: traditional meat inspection
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## Results Supply Chain Inspection + HACCP

The next items are realized as a result of the introduction of the EU Hygiene Package and a partnership between Competent Authority and Industry

- Salmonella levels at carcasses < 2%
  - *Campylobacter jejuni* / *coli*: absent on carcasses
  - *Mycobacterium avium*: all heavy infected farms are identified and cleaned. Only sporadic single animal reactors present (some false positives?).
  - Residues of Antibiotics < 3/10.000 carcasses
  - All information available concerning source of feed and so on.
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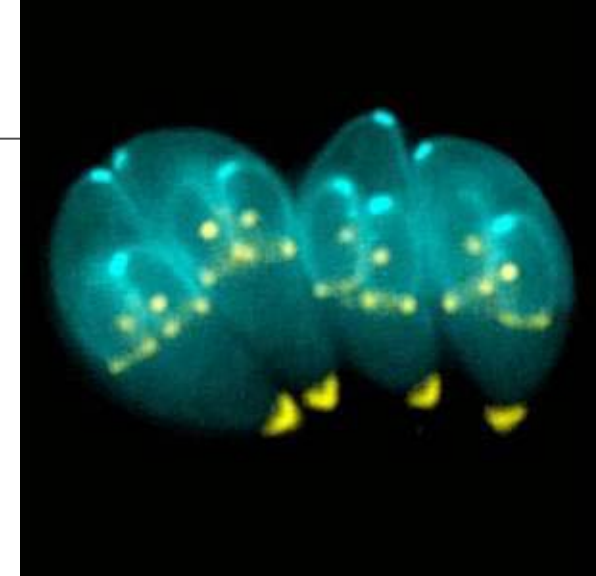


## Next stage

- Optimizing systems with respect to sampling and risk based aspects.
  - Further reduction of salmonella through increased slaughter hygiene (remove 82°C water by organic acids).  
Measures at farm are ineffective, ***a pig is not a chick.***
  - Implement *Toxoplasma gondii* control programme
  - Incorporation of imported slaughter pigs into supply chain inspection.
  - Focus on AM inspection by OV
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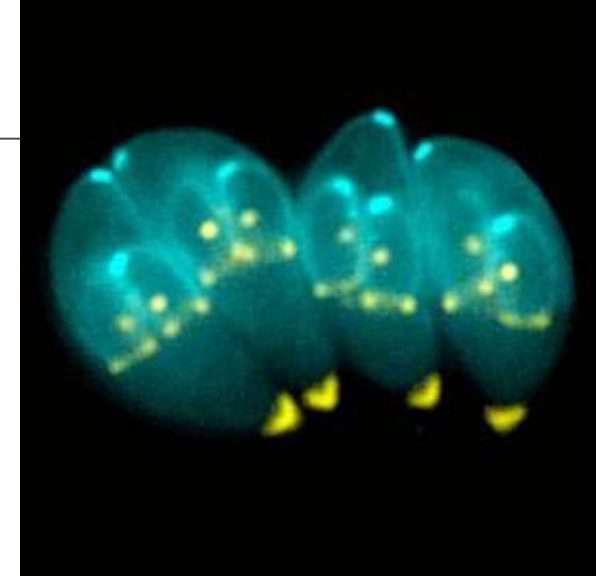


## *Toxoplasma gondii* control I



- Effective code of practice at farm level (sows and slaughter pigs)  
GAP's
- Farmer takes responsibility of biosecurity
- Slaughterhouse verifies system through blood sampling of each herd

## *Toxoplasma gondii* control II



Need a change in 854/2004 (+ 1244/2007)

- Organic raised (free range) pigs: within a *Toxoplasma gondii* control programme
  - Provide possibilities to inspect them also in a supply chain inspection model, no reason to discriminate them under the condition of an effective toxoplasma control programme.
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## *Conclusions*

- **Hygiene Package is effective to improve food safety**
    - There is no need for further specification of legislation.
  
  - **HACCP + Supply Chain Meat Inspection**
    - Provides a good basis to improve meat inspection and food safety both for CA, farmers and slaughterhouses.
    - Implementation of the Hygiene Package is not consistent in the different MS, many more possibilities.
  
  - **Basic problems**
    - Slaughterhouses are not everywhere taking their own responsibilities, or not forced to do so;
    - CA is not everywhere focussing on supervision, but still going on with traditional control activities.
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