

Social and ethical aspects of alternatives to the killing of day-old male chicks

EAAP, Nantes, Ethical aspects of breeding

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Introduction: The Current Situation

- Since the fifties: demand for safe and cheap food
 - Innovation / new techniques and developments (housing, veterinary care, etc.)
 - Competition in sector
- Separate production chains for poultry meat and eggs
- Annually over 10.000 million eggs produced in The Netherlands
- 31.6 million laying hens present (2012)
- 40-60 million one-day old male chicks of layer breeds are killed

Introduction, alternatives

- Raise the males for meat production (dual purpose / combination chicken)
- In ovo sex determination

Different techniques

- Analyse a sample from the egg
- Direct optic techniques (spectrophotometry)
- Genetic Modification (GM) to facilitate optic detection

Different moments

- Before incubation (most likely possible with GM)
- First half of incubation
- End of incubation



Research questions

- Why is the killing of one day old chicks problematic?
- Which ethical aspects are involved in the different situations?
- Which (underlying) values play a role when comparing the different situations?
- Do the alternatives have the potential to really solve the problem of killing day old male chicks?

Method

Reflective Equilibrium Model (REM)

- Exploration 1. Which questions arise from this case?
- Explication 2. What is the moral question?
3. Which options are open at first sight → What can be relevant alternatives?
4. Which factual information is lacking at this moment?
- Analysis 5. Who are involved and what is their perspective?
6. Which arguments are relevant to answer the moral question?
→ Ethical Matrix
- Consideration 7. What is the weight of the arguments in this case?
8. Which option for action is preferred based on the weighing of the arguments?
- Approach 9. Which steps result from this?

Ethical matrix

Respect for:	Well-being / to do good / do no harm	Autonomy / choice / naturalness	Justice / fairness
Citizen	Food safety, Acceptability, Quality of life	Democratic, Consumers' choice	Affordable product, Availability for all markets
Production chain	Maintain profitable, Quality of life	Freedom of management	Fair trade, Fair legislation
One-day old male chicks	Animal welfare	Integrity, Right to life	Intrinsic value, Hierarchy (human-animal)
Environment	Conservation	Biodiversity	Sustainability



Ethical matrix

■ Current situation:

Positive:

- Efficient production
 - Cheap product
 - Low environmental impact

Negative:

- No freedom of choice (citizen)
- Violation of all three columns concerning the one-day old male chicks (interpretation and rating of importance differs between science, society and sector)

Ethical matrix

■ Dual purpose

Positive:

- All three columns concerning the one-day old male chicks improve (importance depends on stakeholder)
- Freedom of choice (citizen)

Negative:

- Relatively inefficient production
 - More expensive product, market problems
 - High environmental impact

Ethical matrix

■ In ovo sex determination

Positive:

- Efficient production
 - Cheap product
 - Low environmental impact

Positive / Negative:

- Columns concerning the one-day old male chicks improve or become worse, depending on technique and view (science, citizen or sector)
- Depending on viewpoint and perception food safety is at stake when using GM

Conclusions

- Killing of day-old male chicks is problematic because the aspects intrinsic value, animal integrity and right to life are violated
- Especially dual purpose alternative improves the ethical objections with regard to the animal
- However, the alternatives give rise to new ethical dilemmas

Conclusions

- Examples of new ethical dilemmas:
 - Inefficient production with dual purpose (environment vs. animal and economics/market vs. animal)
 - How to value importance of killing a young animal vs. killing an embryo at certain stage?
 - How important is the utilization of the chicks/embryos?
 - Acceptance of GM
 - How to weight the different interpretations and appreciation between, for example, citizen and sector? E.g. with regard to intrinsic value and production efficiency?



Questions or remarks?

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