

# **Protecting the food chain: food safety, animal and human health and the use of homoeopathy in farm animals**

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# Protecting the food chain...

- **Food quality and food safety: definitions**
- **From animal health via food safety to human health**
  - Use of medicine
  - Healthy animals
- **The potentials for use of homoeopathy in farm animals**
  - Philosophically
  - In practice in today's North-western European farming
  - Legally (EU)
  - On a global level
- **Future perspectives: education, development of farming and legislation**

# FOOD QUALITY

## (example organic food)

- Process quality: primary production, food processing & distribution
  - Ensuring animal welfare and health
  - 'Naturalness'; e.g. production/consumption locality and season
  - Impact of all the above on environment, social balance, human culture, global perspectives, local ecological balance etc.

# FOOD QUALITY

## (example organic food)

- Product quality: limited to food 'alone'
  - Food safety
  - Sensory quality
  - Nutritional quality

# Food safety as part of food quality on-farm

On-farm:  
**Securing animal health and welfare and the 'good life' of the animals on organic farms**

- Process quality: Livestock production and & food processing
- Product quality: the food 'alone', incl. **food safety**

On-farm:  
Securing that food is enjoyable, healthy and **safe: e.g. management, medicine use, bio-security**

# Use of antibiotics in farm animals

- **In 1997: 10.5 ton active antimicrobial substance used in EU**
  - 3.494 ton used therapeutically in veterinary medicine
  - 1.599 ton used in animal food (feed and water)
- ➔ **Risk for residuals**
- ➔ **Risk for transfer (conjugation, transduction or transformation) of antimicrobial resistance to humans**

# Reducing the use of antibiotics in relation to human health

- **Improved animal health => improved product**
- **If no use of ab:**
  - **No risk for residuals**
  - **No risk for transfer of antimicrobial resistance to humans (contact with animals/ animal products)**

Possibilities for intervention in  
cases of disease necessary  
- for animal welfare reasons!

Homoeopathy one relevant  
option

# Healthy farm animals?

## Dk dairy farming as example of development of 'farm life':

- Number of dairy farms has decreased by 55%
- Mono-cultures
- Limited labour resources
- Number of farms with more than 100 cows has increased from 2.5% (1991) to 22% (2002)
- No cows 90
- Hectares 86,5
- Yield 8442 kg
- Average milk quota 600.000 kg/herd

# **Organic EGGs in the UK: 'Natural product' from 'an integrated system'?**

- **In excess of 95% of eggs come from large-scale systems:**
  - **3,000 birds in a flock**
  - **permanent housing**
  - **Not land-based systems**
- **More than 95% of the pullets come from conventional pullet rearing systems**
- **More than 90% of birds in a major certification body flocks were beak trimmed in 2003**

# **Preventive use of antimicrobial substances in livestock production**

- **A consequence of intensive farming**
- **Can it be replaced with homoeopathy?**
  - **In some cases seems to work ...**
- **But does it make sense?**
  - **NO!**

# The principles of homoeopathy

- **Balance and harmony**
- **'Remove all obstacles to cure'**
  
- **Homoeopathy used in order to make imbalanced farming possible?**
  - **Violence to the principles!**
  - **Discussion left: definition and limits of 'imbalanced'**

**Homoeopathy in farm animals:**

**'Medicine for disease treatment'**

**AND**

**'A way of thinking'**

# Conclusion on the way from homoeopathy use to human health via food safety

## **Homoeopathic principles**

- **Emphasise balance and harmony**
- **'Remove all obstacles to cure'**
- **Healthier animals → more healthy and safe products**

## **Homoeopathic medicine used for intervention when necessary**

- **limit risks following medicine use (residues and resistance)**

# **Strategies to improve animal health**

- **Hygiene! Hygiene!!!**
  - **Air!**
  - **Feeding: well balanced**
  - **Breeding goals /  
cross breeding**
- 
- **Housing systems:  
harmony / flock life**
  - **Suckling systems etc.**

# An explicit non-ab strategy: DK project on phasing out antibiotics from dairy ...

- **23 organic herds – farmer driven action research project**
- **'Farmer Field Schools': focus on improved conditions for animals & management strategies**
- **3 farmers use homoeopathy**
- **Result: reduced ab-use up to 60%**
- **'Disease indicators': situation unchanged**
- **Some farmers' conclusions:**
  - **Profound herd improvements must be basis**
  - **In some cases: ab necessary**
  - **Not focus on homoeopathy: too ressource demanding!**

# **In practice in farming life: which options to use homoeopathy?**

- Severe questions: Can farm animals be brought into balance today? Can they respond to a energy based treatment method?**
- Severe lack of vets who can use homoeopathy!**
- Severe lack of labour resources and time on most farms**
- Structure of veterinary clinics and practice & ways of collaboration**
- Lack of traditions for use of homoeopathy**
- 'Farmer Field Groups' a relevant option to also learn homoeopathy**

# Legislation in EU: Makes it difficult to use homoeopathy in farm animals!

- **Simple registration procedure debated**
- **Distinguish between 'Homoeopathic remedies for animals' and 'Homoeopathic remedies' (regarding registration)**
- **Organic farming: 'illegal' and 'encouraged'**
- **Cascade rule can be applied → consequences!**
- **Clarifications expected in November**

# Homoeopathy in farm animals on a global level

- **Generally: few reported studies, few systematically described experiences / studies**
- **USA: Organic farming ab prohibited: homoeopathy widely used**
- **Much organic farming (Europe): interest, lack of knowledge, in-appropriate use and too much focus on 'the medicine' compared to 'the way of thinking'**
- **'South globe': relevant to consider homoeopathy!**  
**Severe problems with:**
  - Epidemic diseases
  - In-appropriate medicine use
  - Antimicrobial resistance and medicine residues

# Homoeopathy in farm animals: future perspectives

- **Legislation: exhausting process seems to close to an end – end result partly discouraging, and solutions must be found for practical use**
- **Development of farming systems may limit the relevance of use of homoeopathy**
- **Structure in farming environment / veterinary practice**
- **Education! (Group training / FFS approaches)**
  - Veterinarians
  - Farmers
  - Both together: 'education in collaboration'
- **Access to homoeopathic remedies should be improved in some countries / regions**
- **Big challenges to analyse and improve the situation e.g. in Africa**