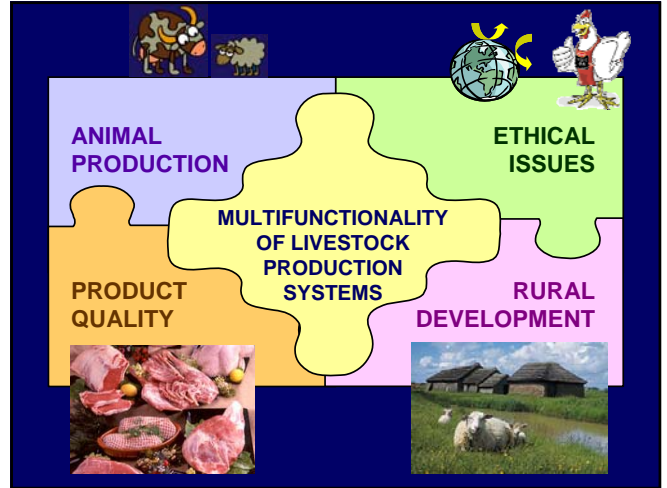


Societal demands for safe and high quality meat production. Environmental considerations



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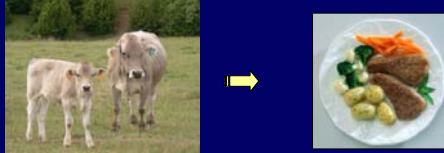


Society's perception of meat quality

What is quality?

Goodness of the product for people at different stages in the meat chain

from producers ... to consumers



Role of non-consumers in society

Quality for consumers

Intrinsic quality

- Hygienic quality
- Nutritive quality
- Organoleptic and sensorial quality



Influenced by production system and whole chain management

Extrinsic quality

- * * * Feeding and origin
- * * Animal welfare, environment
- + Breed, processing and storage



Livestock impact on the environment



INTENSIVE vs. EXTENSIVE management



Pollution
air, soil, water



Erosion

Encroachment

Small-scale: animal-plant interactions

Large-scale:

Landscape diversity: *open pastures ... fauna diversity*
vs. Environmental hazards



Grazing by livestock is often the only tool for an adequate management of natural areas integrating both productive and landscape preservation goals

Environment resources for meat production

- **Grazing by dams**
maintenance of the herd
finishing offspring off pasture
- **Grazing by offspring**
grass-produced meat



Questions to be solved

- What kind of pastures
 - > surface availability
 - > forage production and quality
 - > alternative uses
- What kind of animals
 - > physiological stage
- What can be expected
 - > animal performance
 - > environmental impact

Genetics and production Feeding management
Feed resources Reproductive management

Old questions, new approaches



Objective: quality of production and system economic performance

different
animal
types



different
performance

complementarity

different
pastures



different
environmental
impact

Grazing by offspring: grass-produced meat

Effects of grazing vs. fattening with concentrates

- **PERFORMANCE**
- **CARCASS QUALITY**
Dressing percentage
Conformation
Fat score
- **MEAT QUALITY**
Organoleptic and sensorial quality:
texture, flavour, taste, colour
Nutritive quality:
PUFA, CLA, omega-6:omega-3



Traceability of feeding system?

Quality attributes relating livestock and the environment

- Environmental sustainability
- Geographical origin and typicity
- Differentiate product quality
- ...
- Economic performance of the food chain



EU and Target
countries

Opportunity for differentiation
- production system
- product quality

and further
research...!



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