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Fulfilling demand about organic meat: physical product development with a consumer mind

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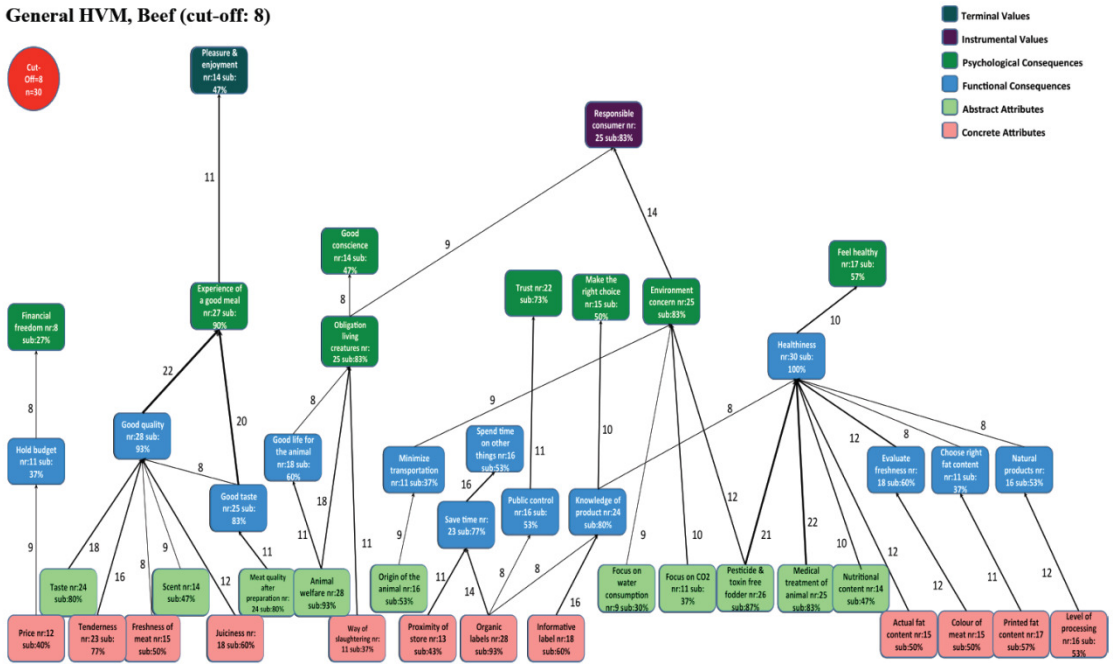
ORGANIC MEAT FROM A CONSUMER MIND

- Animal welfare
- Healthiness
- Good eating quality



Master of Science in Marketing

Master Thesis

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TO WHICH EXTEND CAN IMPROVED TASTE BE REALISTICALLY COMBINED WITH MORE "RESPONSIBLE" PRODUCT POSITIONING?

THE "SUMMER" PROJECT INCLUDES

- Chicken
- Pork
- Beef

Superb and **M**arketabel **M**eat from **E**fficient and **R**obust Animals - **SUMMER**

DESIGN

- Free range system
- > 10 m^2 per chicken with grass and herbs
- Two feeding strategies
  - **HP** – pelleted organic standard feed
  - **LP** – Locally produced choice feed

Hubbarb JA757

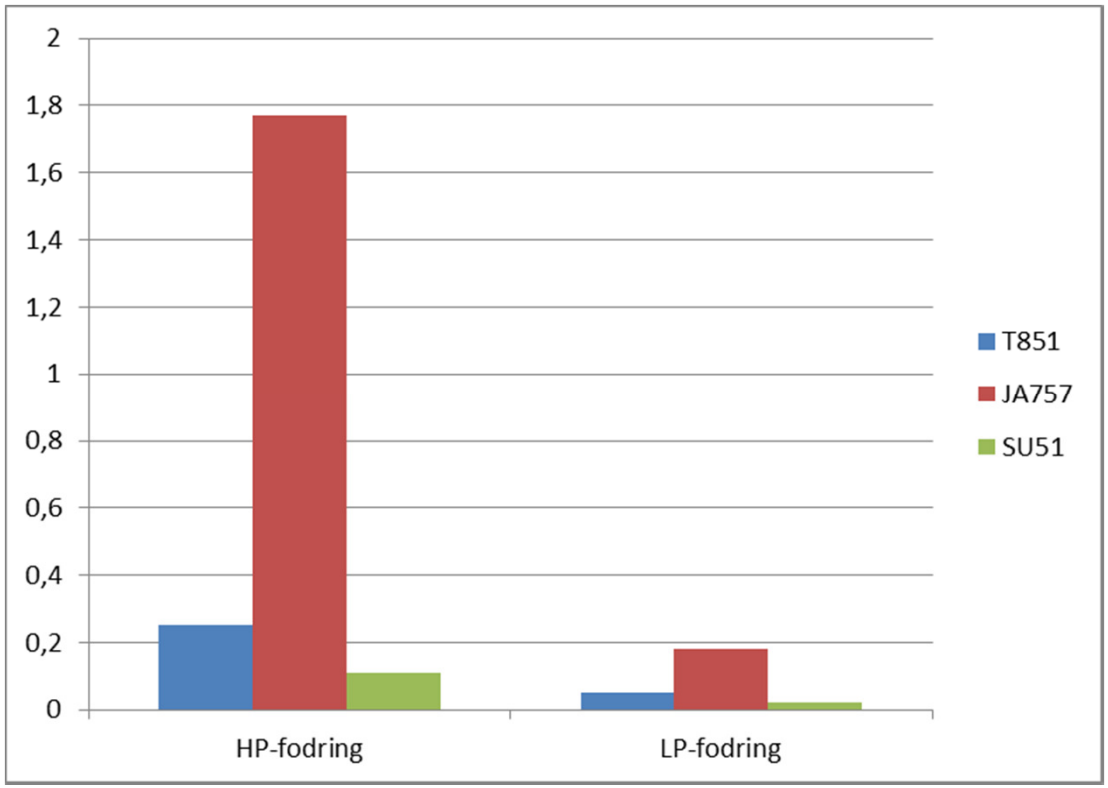
Sussex 51

Sasso T851

Effect of protein source

JA757 fed either HP or LP, slaughtered at 69 days

GAIT SCORE – INDEX OF WALKING ABILITY

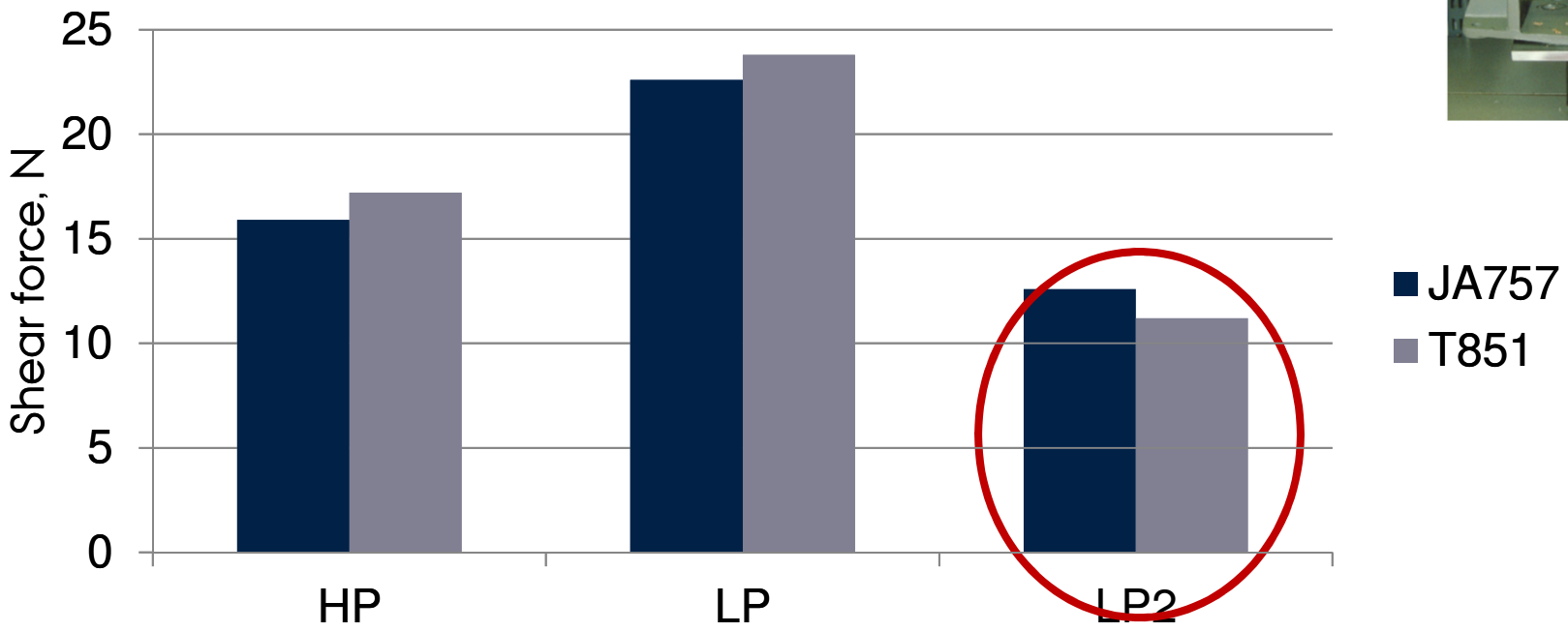


Steenfeldt & Horsted, 2013

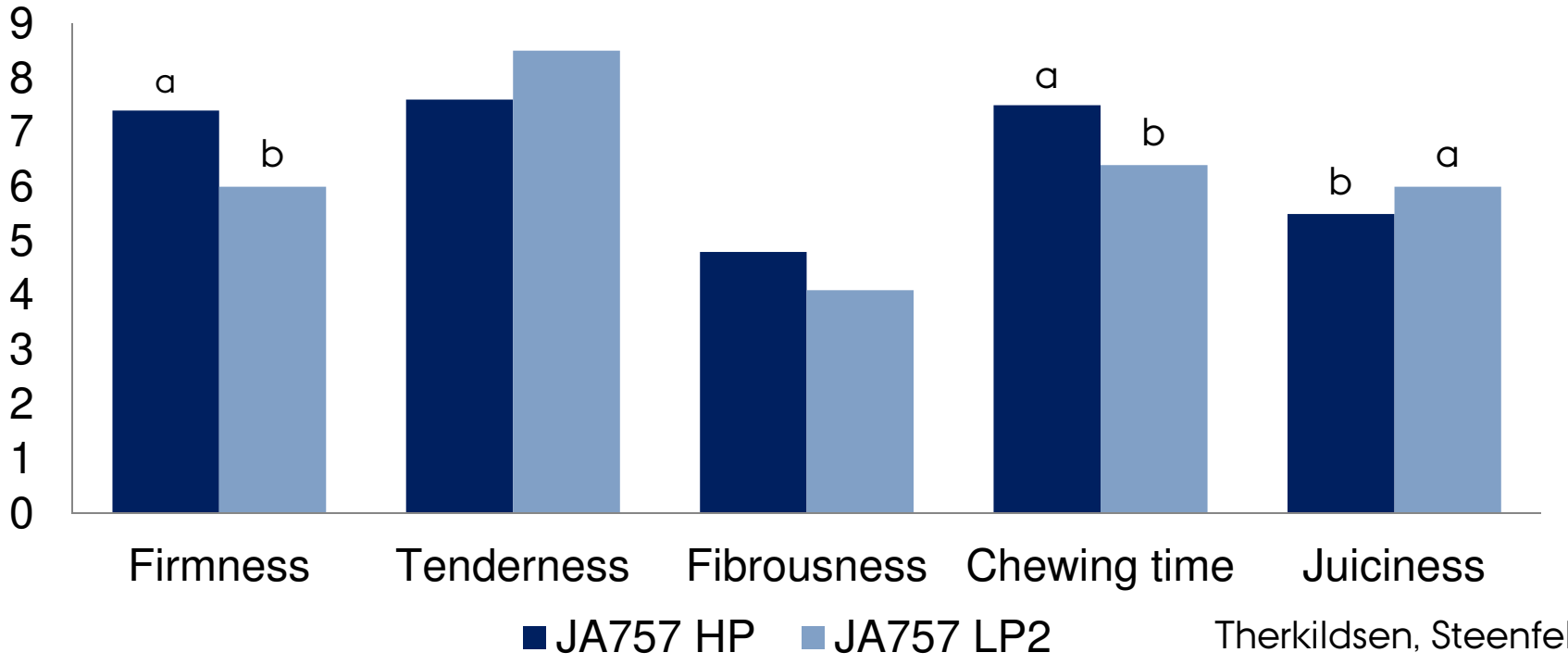
GENOTYPE

› Color
› Form – skinny chickens

SHEAR FORCE OF BREAST DEPENDING ON PROTEIN SOURCE



SENSORY EVALUATION OF TEXTURE OF BREAST FILET FROM BROILERS ON EITHER HP OR LP2 FEEDING STRATEGY

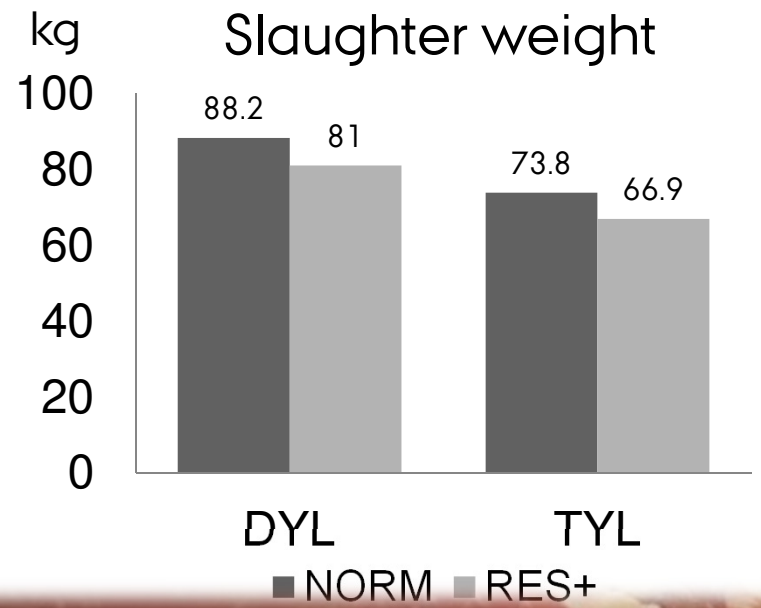


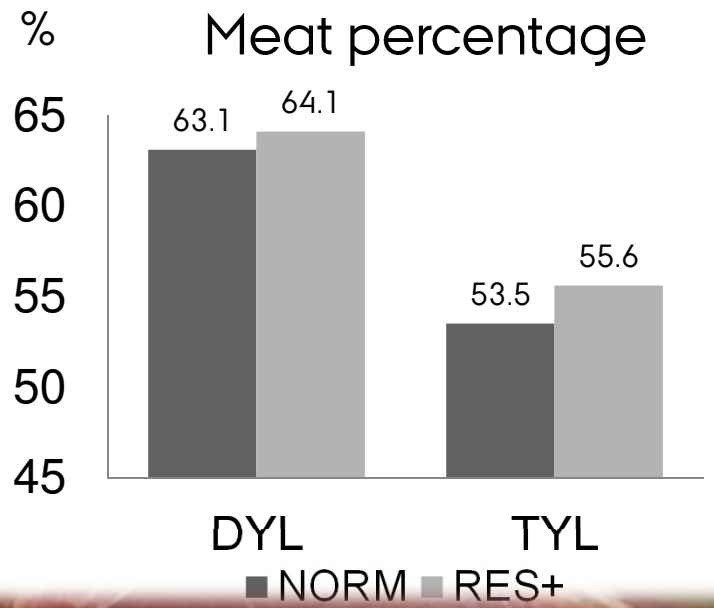
Therkildsen, Steenfeldt & Horsted, 2013

CHANGED CONFORMATION OF CARCASS

FREE RANGE ORGANIC SLAUGHTER PIGS
GROWING PIGS FORAGING GRASS CLOVER WITH HERBS AND CHICORY
05 . 09 . 2012

SLAUGHTER WEIGHT AND MEAT PERCENTAGE





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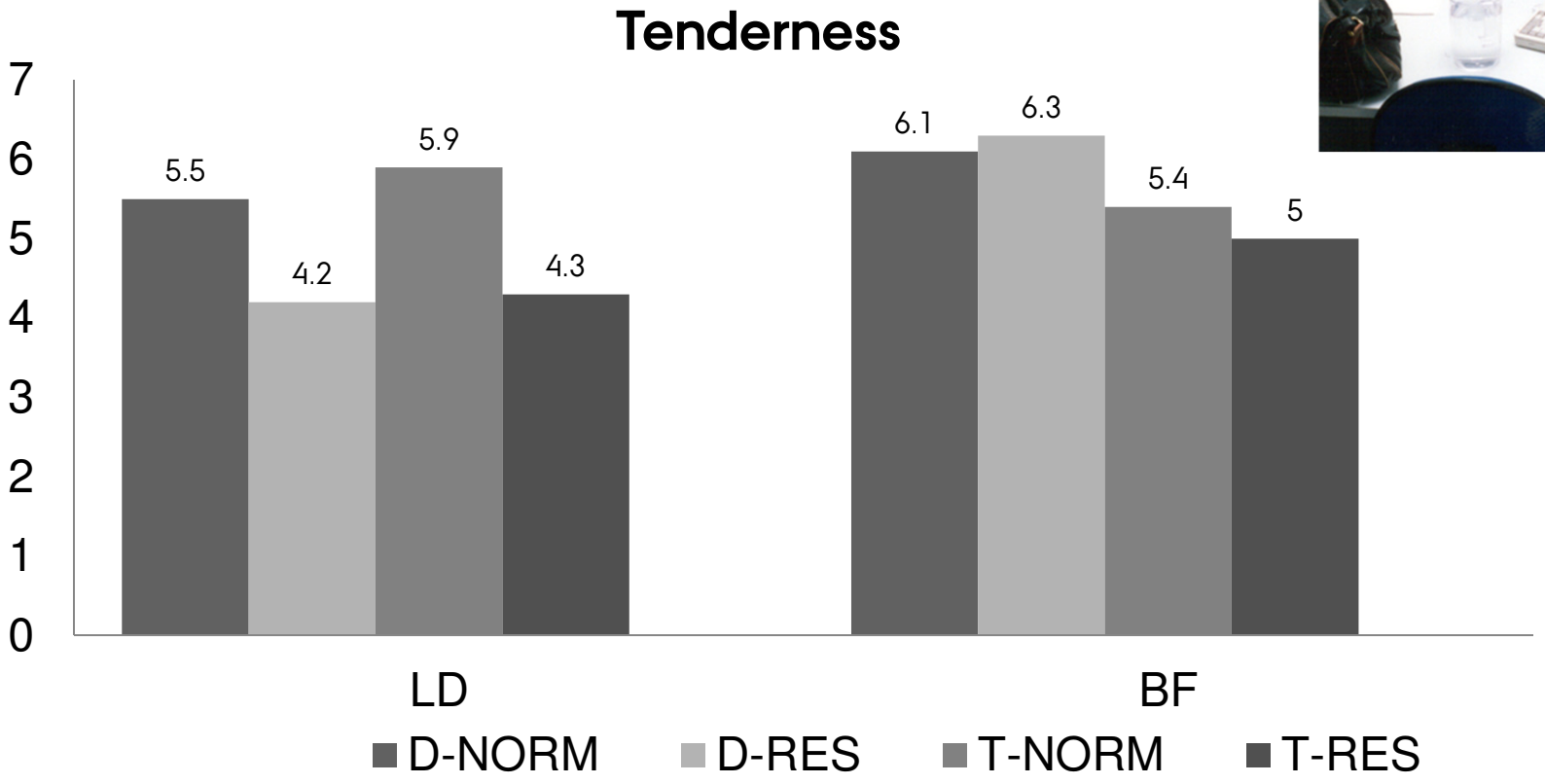
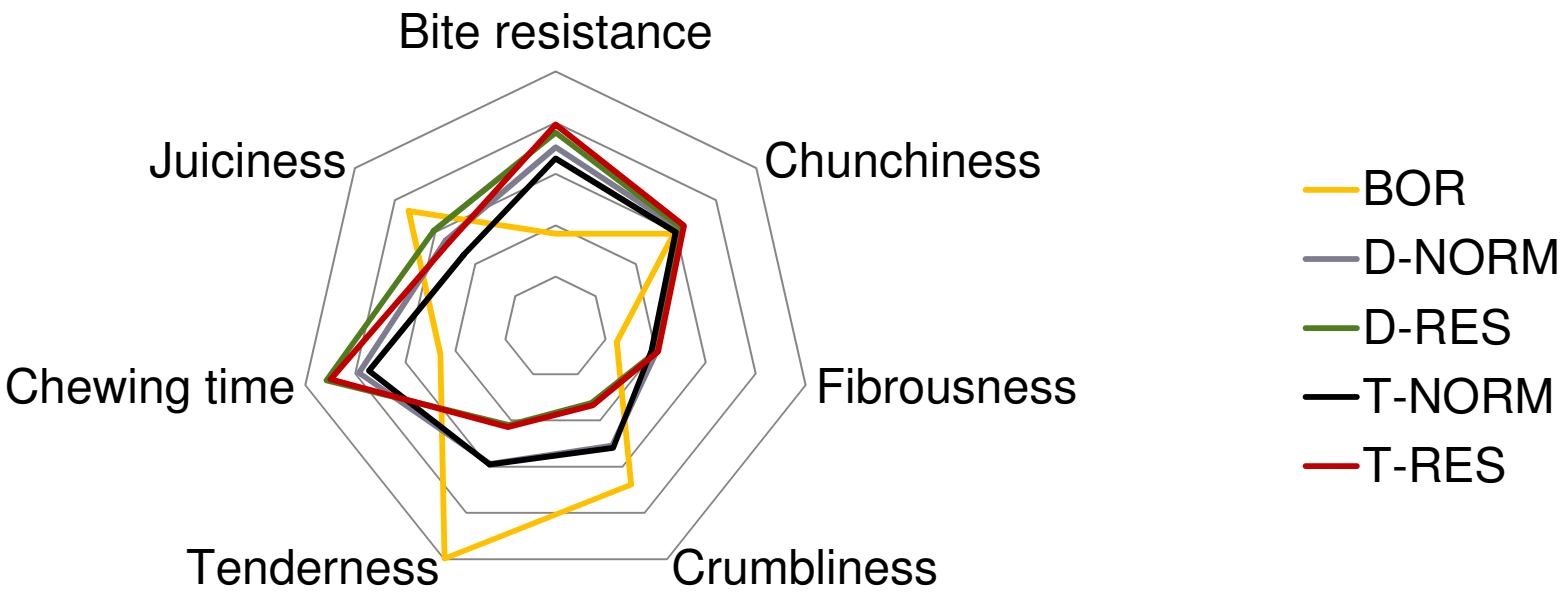
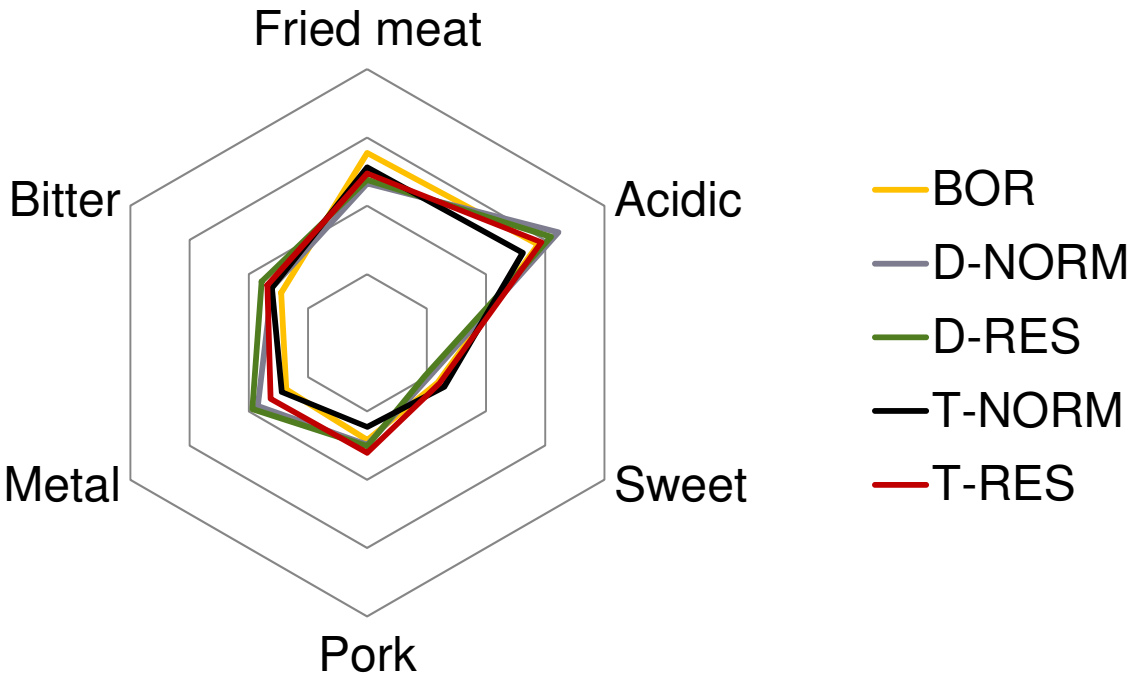
SENSORY EVALUATION -
TEXTURE



SENSORY EVALUATION - TEXTURE



SENSORY EVALUATION - TASTE



ORGANIC BEEF FROM ORGANIC DAIRY FARMS

- Cross breed (Danish Holstein x Limousine)
- Intact males

HEALTHINESS
SLAUGHTER DIRECTLY FROM PASTURE

- Low fat
- Healthier fat (more PUFA, more n-3 fatty acids, lower n-6/n-3 ratio)
- More vitamins (A and E-vitamin – antioxidants)

HANDLING OF FREE RANGE ANIMALS – RISK OF STRESS

- Dark meat
- Short shelf-life

MAIN POINTS

- Superior healthiness and eating quality of meat is **not a direct** consequence of animal welfare and vice versa
- Attention towards the effect of production methods on meat quality traits is necessary in order to **optimize quality in all further processing steps**
- **Weighting** of consequences – will the consumer accept a tougher steak if the meat is healthier?
- **Change in consumers mind** – (e.g. a skinny chicken might be the tastiest)

  but also in the **price setting at the slaughterhouses** etc.

THANKS TO ALL SUMMER PARTNERS

- **Aarhus University**
  - Department of Agroecology
  - Department of Animal Science
  - Department of Food Science
  - MAPP Centre
- **Knowledge Center for Agriculture**
  - Cattle
  - Poultry
- **Center of Development for Outdoor Livestock Production**
- **Organic pig producers**
- **Friland**
- **Top-æg**
- **Sødams økologiske Fjerkræslagteri**
- **Uddanelsescenter Holstebro**

AND THANKS TO

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FORSLAG TIL PROJEKT TIL DET STRATEGISKE FORSKNINGSRÅD

WORKING TITLE:

ORGANIC MEAT FROM BEEF AND PORK TO FULFIL SOCIETY AND CONSUMER EXPECTATIONS

›

› Objective: **The objective is to optimize the efficiency in organic meat production with respect for organic principles and product quality traits.**

› Anticipated results and impact related to both science and society

› **Organic meat from pigs and cattle that that are produced efficiently and in a volume so it can contribute to eg. the 300.000 public meals and also become a profitable export product, because of exploration of specific muscle characteristics and content of health beneficial composition – fatty acids and vitamins.**