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# Interactive effect of dietary energy concentration and genotype on the growth rate, feed conversion and body composition in the growing finishing period

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## Introduction

Main focus of pig breeding:
→ Realize a high growth level
→ Optimize the production of lean meat

## Objective

Investigate the interactive effect of dietary energy level and genotype in order to achieve the main focus of pig breeding.

## Materials and methods

**Diet:** - Standard Energy level
- High Energy level

**Genotype:** lean, intermediate lean, less lean
→ Piétrain crossbreds

Net Energy (NE) / Crude Protein (CP) content:

| | Standard energy diet | High energy diet |
|---|---|---|
| 20-40kg | 9.8 MJ NE $kg^{-1}$ 18% CP | 10.4 MJ NE $kg^{-1}$ 18% CP |
| 40-70kg | 9.8 MJ NE $kg^{-1}$ 16% CP | 10.4 MJ NE $kg^{-1}$ 16% CP |
| 70-100kg | 9.7 MJ NE $kg^{-1}$ 15.5% CP | 10.2 MJ NE $kg^{-1}$ 15.5% CP |

**Measurements:**

Growth on animal basis

Feed intake on pen basis

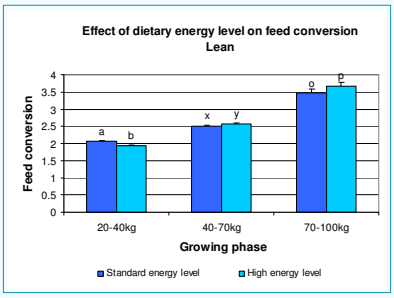
Slaughterhouse: lean meat content

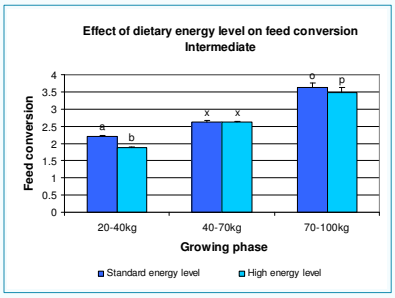
**Experimental design:** Pen: Diet x genotype

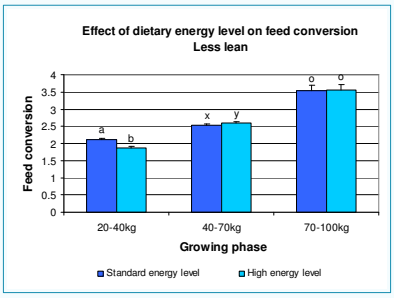
Per pen: 10-12 animals

## Results

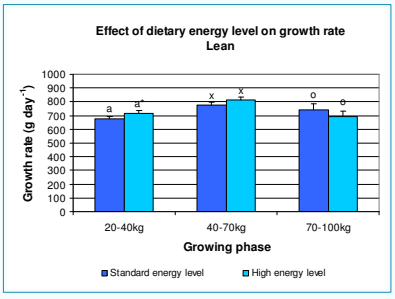
**Diet x genotype**: Feed conversion

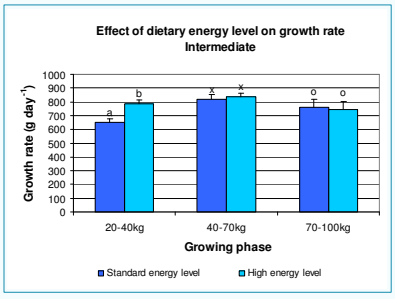


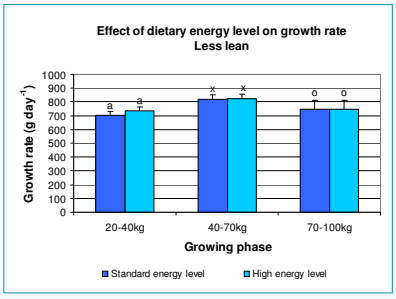




**Diet x genotype**: Growth rate




* 0.1<P<0.05

**Diet x genotype**: No effect on body composition

## Conclusion

During first phase, feed conversion and growth rate are positively influenced by the high energy level diet.

At slaughter weight, no significant difference in body composition between diet x genotype levels.