

ALKOSEL[®] - Pig Meat Quality Trial

- University of Liège - Belgium -



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- Trial Details -

✓ Animals :

- Fattening period : from 14/06/02 to 25/09/02 ie 105 days
- 90 growing/finishing pigs split in 2 groups :
 - 45 pigs in control group
 - 45 pigs in Alkosel group
- Similar groups :
 - genetic : Females - LB x I and Males - Belgian Piétrain (HAL sensible)
 - sex : 16 females and 29 castrated males in each group
- Fasting period : 12 h before truck loading



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- Trial Details -

✓ Feed :

- Control : 0.5 ppm Se in standard feed

0.4 ppm Se (Selenite) + 0.1 ppm Se (diet)

- Alkosel : 0.5 ppm Se in standard feed

0.15 ppm Se (Selenite) + 0.1 ppm Se (diet) + 0.25 ppm Se (Alkosel)

- Standard Feed : wheat-barley-soja based

- Protein : 14.80%

- Crude Cellulosis : 4%

- Fat : 2.50%

- Phosphorus : 0.35%

- Digestible Lysine : 0.68%

- Vit E : 80 ppm

- Se Analysis :

- Control : 0.519 ppm

- Alkosel : 0.494 ppm



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- Trial Details -

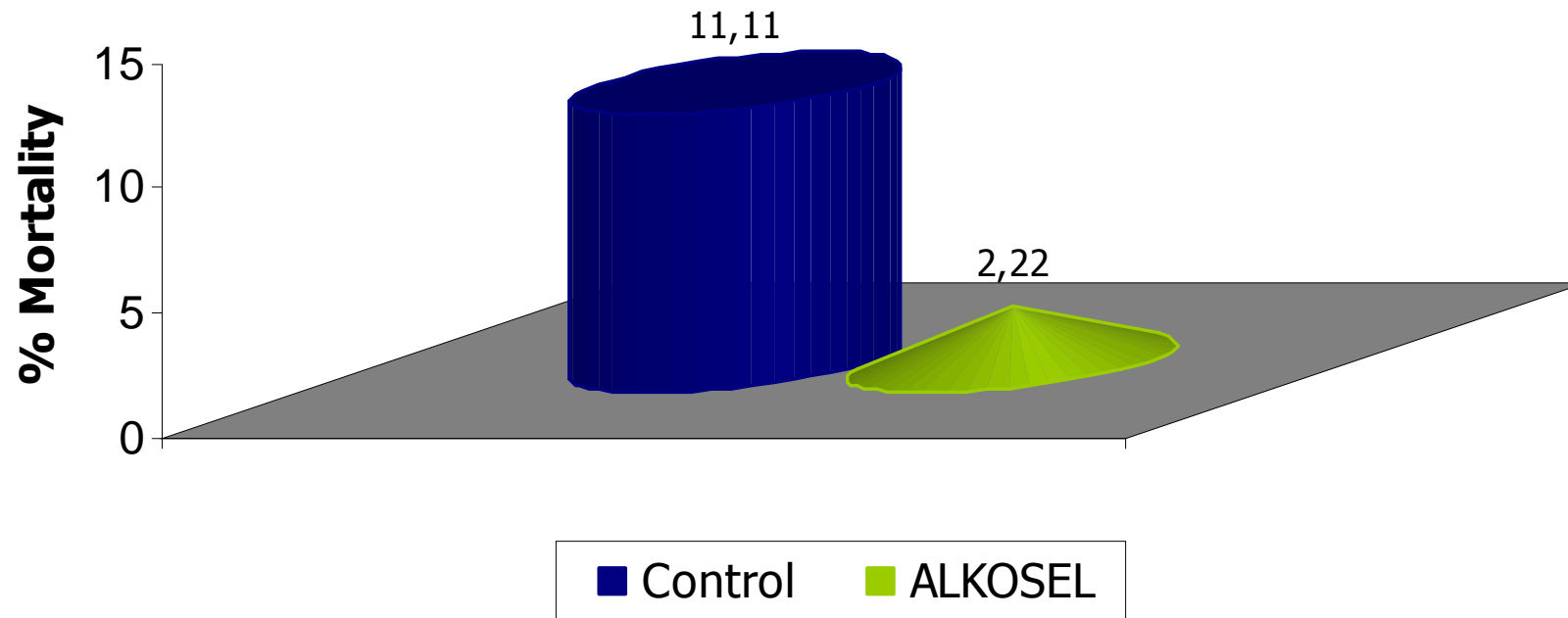
✓ Logistics :

	ALKOSEL Group	Control Group
Departure to Slaughter House	25/09/02 4:30 am	24/09/02 3:25 am
Arrival at Slaughter House	25/09/02 5:20 am	24/09/02 4:30 am
Slaughter	25/09/02 10:50 am	24/09/02 9:15 am
Waiting Period	5H30min	4H45min
pH	26/09/02 6:00 am <i>ie 19H10min after slaughter</i>	25/09/02 5:30 am <i>ie 20H15min after slaughter</i>



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- A Lower Mortality for the Alkosel Group -

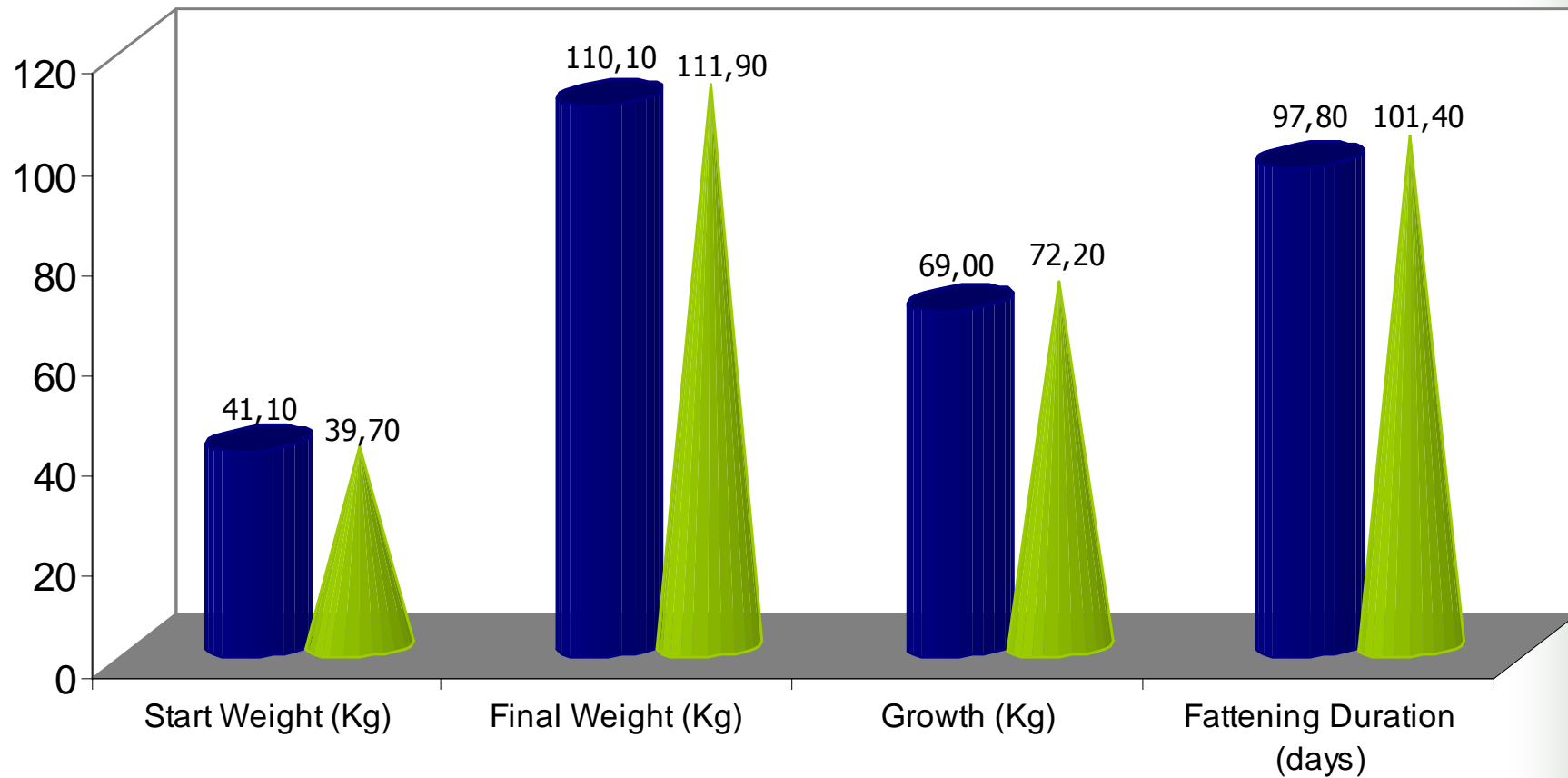


⊕ **A reduced mortality in the Alkosel group**



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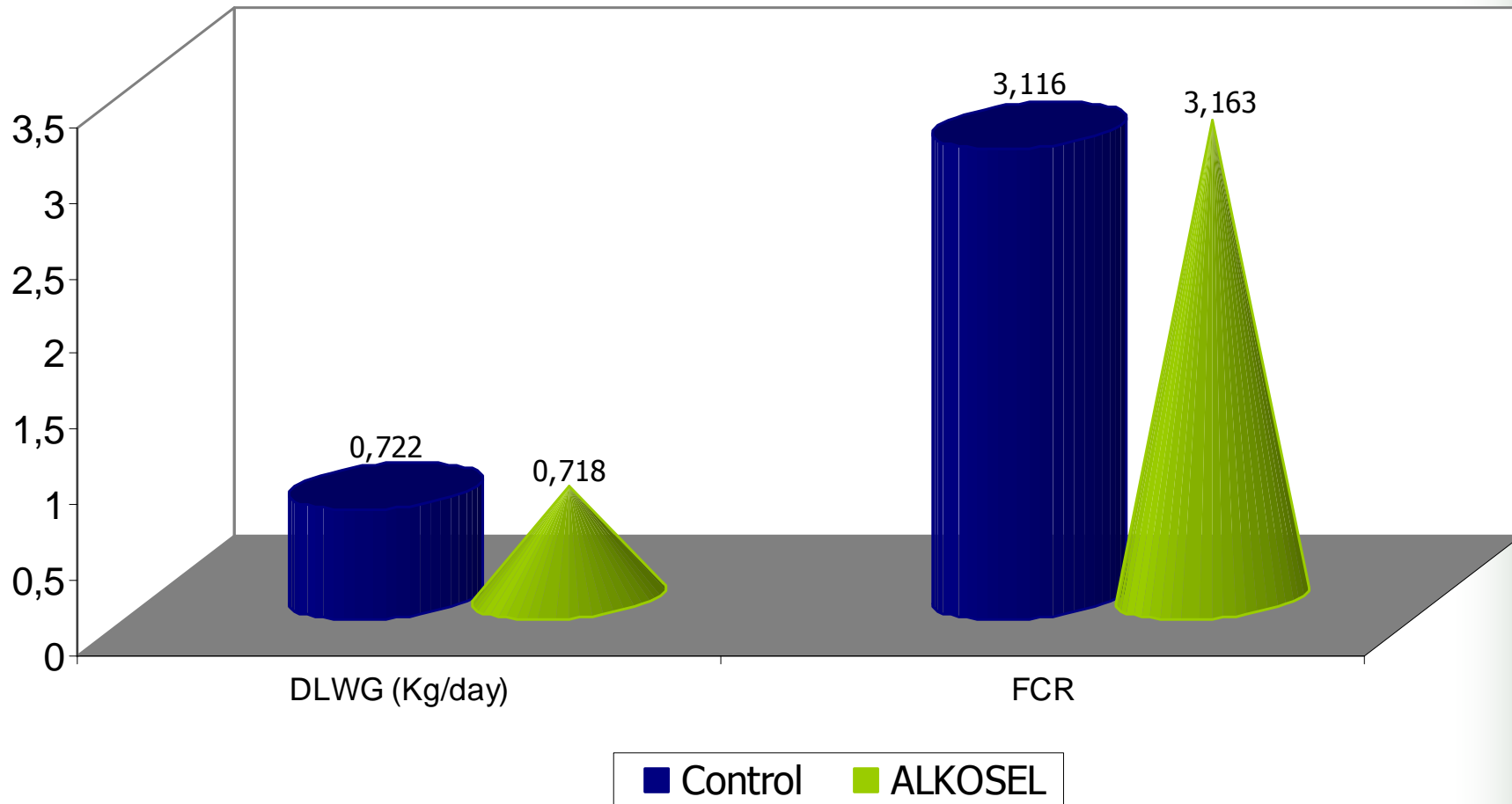
- Zootechnical Performances (1/2) -



■ Control ■ ALKOSEL

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- Zootechnical Performances (2/2) -



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- Mortality & Zootechnical Performances -

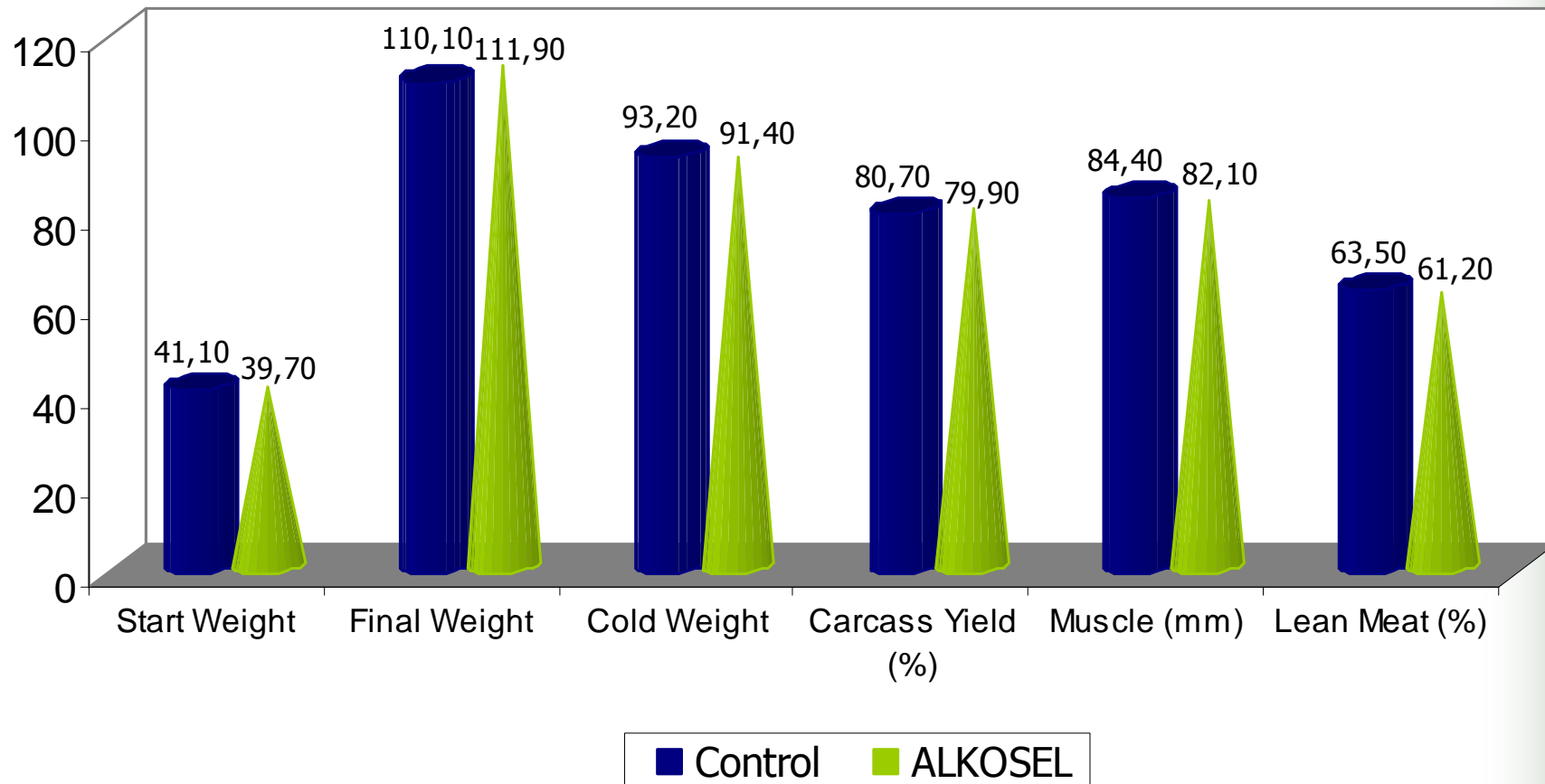
✓ Results / Discussion :

- Normal level of performances assuming Belgian genetic standards
- No differences between the 2 groups Control and Alkosel
- DLWG analysis confirms a normal difference in performances between males and females

 **Similar zootechnical performances**

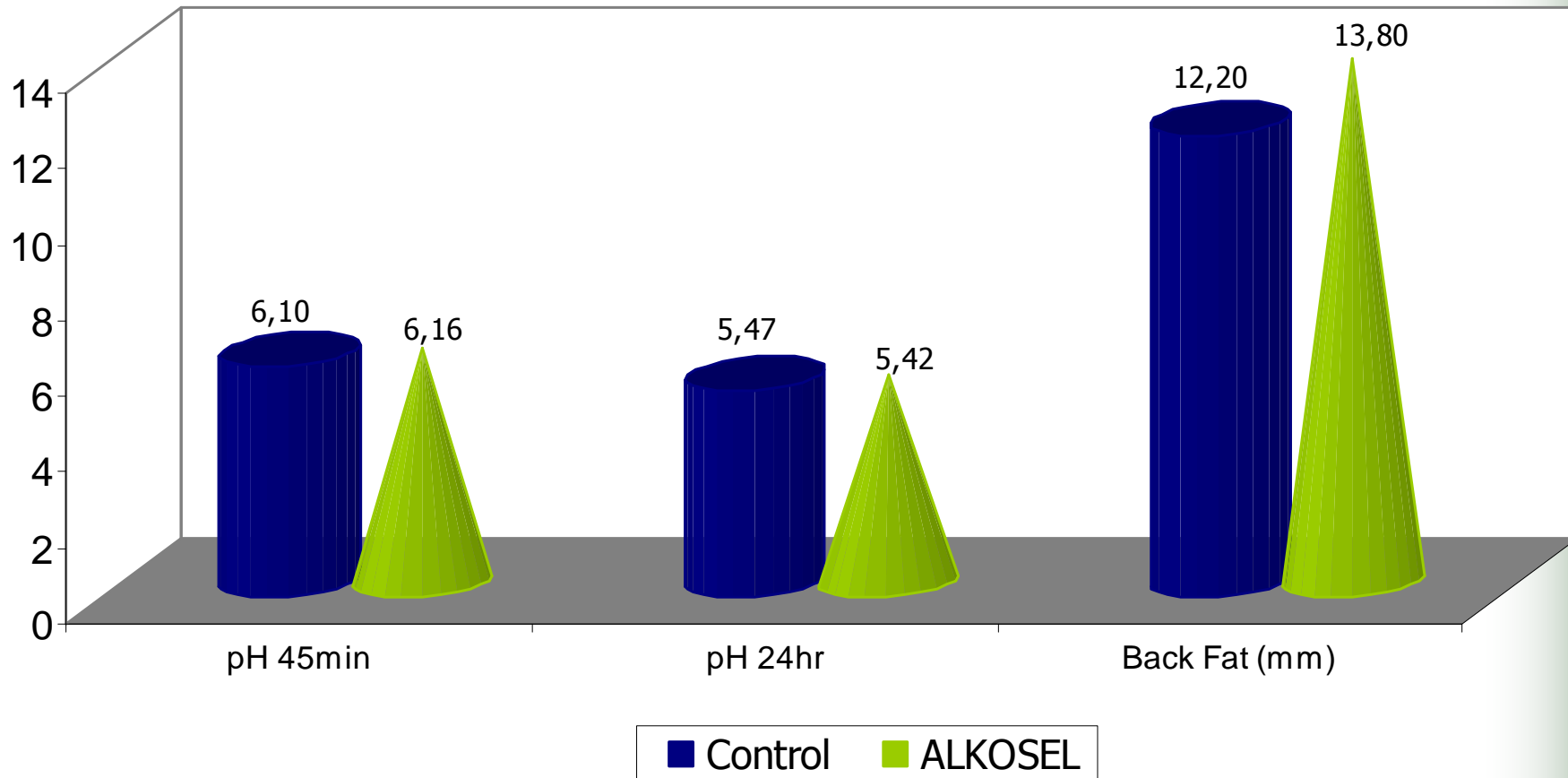
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- Slaughter Measurements (1/2) -



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- Slaughter Measurements (2/2) -



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- Carcass & Meat Quality -

✓ Results / Discussion :

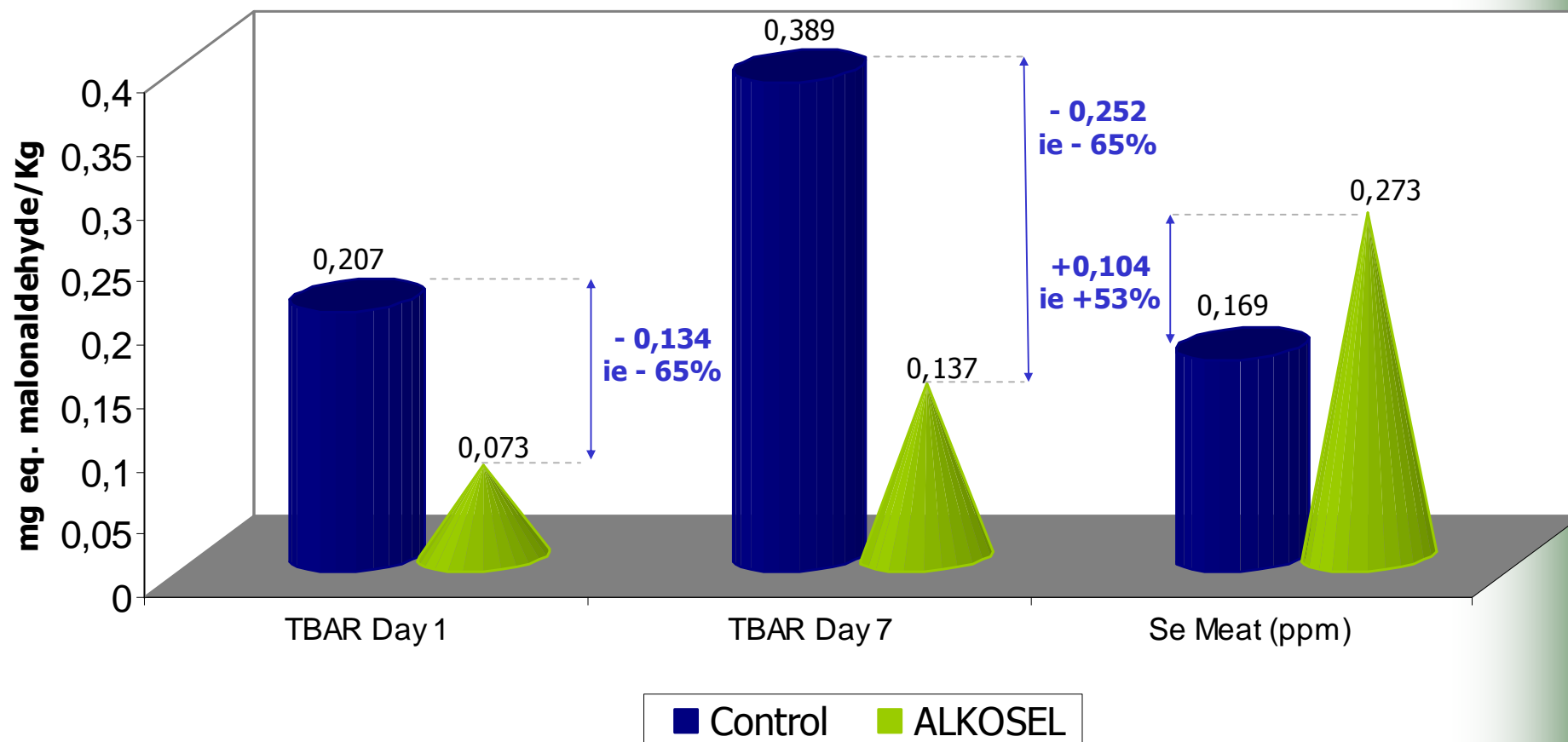
- No big/statistical differences between the 2 groups Control and Alkosel for :
 - Carcass quality,
 - Meat quality (pH, colour, water retention).
- Potentially due to low number of pigs.

⊕ No major differences in carcass/meat quality



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- Meat Oxidation -



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- Meat Conservation -

✓ Results / Discussion :

- Statistical difference in meat conservation. Meat from pigs of the Alkosel group show a lower oxidation rate compared to control pigs.
- TBA index is reduced by 65% in the Alkosel group.
- Se in meat in the Alkosel group is increased by 53% vs. Control.
- This higher Se level in meat may explain the lower oxidation rate observed in meat.

 **Alkosel reduces meat oxidation**

 **Alkosel improves meat conservation**

