





Carnitol-L® reduces the number of stillborn piglets when administered before farrowing.

Trial description

1 Set-up

- Various metabolic processes take place in the liver. Consequently, a good liver function is crucial for optimal production.
- Carnitol-L® is a liquid formulation combining L-carnitine, choline, plant extracts and sorbitol. It stimulates the liver function, improves the metabolic status and optimizes energy production.
- 40 ml Carnitol-L®, corresponding to 1.2 g L-carnitine, was daily supplemented in the feed troughs of sows for the last 5 days prior to farrowing.
- The impact of product administration on the average number of live and stillborn piglets was investigated in 2 highly productive Danish sow herds.

| | | Herd 1 | Herd 2 |
|-----------------------------|----------------------------|----------------------------|-----------|
| Latest year productivity | Number of sows | 880 | 1100 |
| | Weaned piglets/sow/year | 33.1 | 39.2 |
| | Live born/litter | 17.9 | 18.8 |
| | Stillborn/litter | 2.2 | 2.1 |
| | Number of litters/sow/year | 2.23 | 2.38 |
| Carnitol-L® supplementation | | in 1 kg pre-farrowing feed | by drench |

2 Measured parameters

The average number of live and stillborn piglets in farrowings before (= control) and after the supplementation of Carnitol-L[®]
- was registered and compared per litter

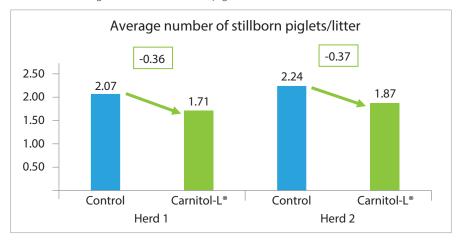
| | Herd 1 | | Herd 2 | |
|----------------------|---------|-------------|---------|-------------|
| | Control | Carnitol-L® | Control | Carnitol-L® |
| Number of farrowings | 595 | 206 | 267 | 211 |

- was determined on a yearly basis, taking into account the number of litters/sow/year
- The return on investment was calculated based on the reported production parameters and the treatment cost.

Results

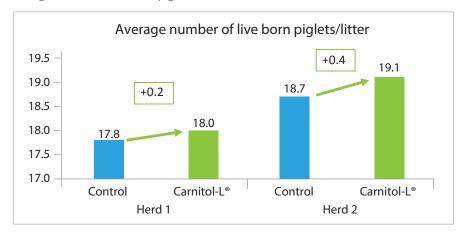
Carnitol-L® supplementation the last 5 days before farrowing resulted in a:

• Significant decrease of the average number of stillborn piglets/litter



| | Decrease of the average number of stillborn piglets/litter | | | |
|--------|--|--------------------|----------------|--|
| | per sow/litter | per sow/year | | |
| | based on trial results | based on number of | f litters/year | |
| Herd 1 | - 0.36 (p value 0.03) | - 0.80 | (0.36 x 2.23) | |
| Herd 2 | - 0.37 (p value 0.07) | - 0.88 | (0.37 x 2.38) | |

• Increase of the average number of live born piglets/litter.



| | Increase of the average number of live born piglets/litter | | | | |
|--------|--|---------------------------------|--------------|--|--|
| | per sow/litter | tter per sow/year | | | |
| | based on trial results | based on number of litters/year | | | |
| Herd 1 | + 0.2 * | + 0.45 | (0.2 x 2.23) | | |
| Herd 2 | + 0.4 * | + 0.95 | (0.4 x 2.38) | | |

^{*}not significant

• The return on investment was 1:2.4 and 1:4.8 when comparing the control farrowings with the Carnitol-L® supplemented farrowings in herd 1 and 2 respectively.

Conclusion

Supplementation of Carnitol-L® the last 5 days prior to farrowing results in an significant decrease of the number of stillborn piglets and an increase of the number of live born piglets.