



Carnitol-L®

Carnitol-L® supplementation during gestation increases weight of neonatal piglets

Trial description

1 Set-up

- The liver is responsible for various metabolic processes. 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 and optimizes energy production.
- Carnitol-L® was supplemented to a standard sow liquid feed during gestation to study its impact on technical performance of the piglets. The trial was performed in a highly productive sow herd.

Latest year productivity	
Number of sows	1180
Number of farrowings	53 per week
Weaned piglets/sow/year	37.6
Live born/litter	18.7
Stillborn/litter	2.2
Number of litters/sow/year	2.35

- The product was supplemented as 2,5 L Carnitol-L® daily in the liquid feed corresponding to:
 - 4 ml per sow per day 28 days prior to farrowing (4 kg feed)
 - 2 ml per sow per day 115-80 days prior to farrowing (2 kg feed)
- The dose of Carnitol-L® was 1 ml per kg dry feed (30 mg L-carnitine) per day.
- A batch was weighed prior to the supplementation (Control = 41 sows) and later batches were weighed at 4 weeks interval. The last weighed batch of sows farrowing (47 sows) had received Carnitol-L® supplement throughout the gestation.

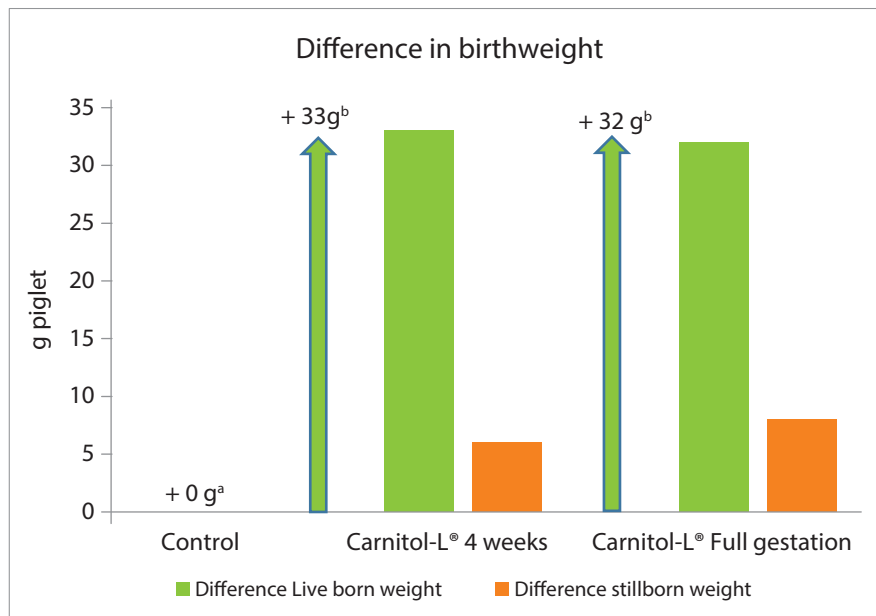
2 Measured parameters

Technical performance of the piglets in the farrowing units was investigated. Piglets originating from sows farrowing during the respective week were individually weighed at birth.

Results

Piglet weight at birth

	# sows	Live born piglets			Stillborn piglets		
		# piglets	Avg. weight (g)	P-value	# piglets	Avg. weight (g)	P-value
Control	41	761	1259 ± 329		118	960 ± 374	
Carnitol-L® 4 weeks	40	734	1292 ± 318	0,05	102	966 ± 364	0,91
Carnitol-L® Full gestation	47	878	1291 ± 333	0,04	120	968 ± 358	0,86



The effect on weight gain is evenly distributed and not due to just a few larger pigs. All piglets in the litter are becoming heavier.

The effect on piglet weight did not differ for supplementation during only the last 4 weeks of gestation compared to supplementation during the full gestation.

Conclusion

Carnitol-L® supplementation during gestation increases the bodyweight of piglets at birth significantly.