

Germany: Use BioAktiv for Better Performance



Saxony-Anhalt Training and Research Centre for Animal Husbandry and Technology, Iden, Germany reported their findings of a study on the use of BioAktiv for Animal Feed on pigs in July 2001. The study started with 100 piglets of the same breed (Pi × (DE×DL)) each for test and control groups, the pigs were fed with two phases (initial and final) of feed as follows:

- Test group two-phase standard feed with 200 g of BioAktiv per tonne of feed
- Control group two-phase standard feed

Due to an acute APP infection during the last two weeks of fattening phase, mortality reduced the test group to 92 pigs and control group to 95 pigs.

Table 1: Feed efficiency data

Parameter	BioAktiv	Control	Difference
Initial weight (kg)	27.4	2.85	
Final weight (kg)	110.3	110.9	
Fattening period (days)	102°	111 ^b	
Feed intake (kg/pig/day)	2.31	2.30	
Feed conversion ratio (kg/kg)	2.84ª	3.09 ^b	✓ 0.25 or 8% lower
Daily weight gain (g/day)	808ª	749 ^b	✓ 59 g/day or 8% higher

a,b - statistically significant p < 0.05

Table 1 shows that pigs fed with BioAktiv had shorter fattening period, better FCR and ADG all with statistical significant (p < 0.05). The 59^1 g higher daily gain when using BioAktiv was also demonstrated in Gaughan's study (2001)², where he reported even higher gain, The same tendency for FCR was also observed,

Figure 1 compares the daily gains of both group over the fattening period. It can be seen that the basis for increasing daily weight gain was established in the initial feeding period. It is clearly evident that in the first 4–5 weeks pigs treated with BioAktiv experienced much higher daily weight gains. The difference in daily weight gains between both groups then decreased somewhat as the feeding period progressed. This very good start also positively affected the carcass quality. It is also striking to note that the BioAktiv group achieved such efficiency in the initial feeding period, even though their efficiency in the rearing period was significantly poorer

¹ Reported as 50 g in the original paper.

² The Effect of BIOACTIVE on the Health and Growth Performance of Pigs



Figure 1: Comparison of daily weight gains during fattening period

Table 2: Carcass quality data

Parameter	BioAktiv	Control	Difference
Carcass weight (kg)	86.6	84.6	√ 9 kg or 2% heavier
Carcass yield (%)	79	77	✓ 2 % higher
Lean proportion (%)	57.6ª	56.3 ^b	√ 1.3% higher
Back-fat depth (mm)	15.6	16.3	✓ 0.7 or 4% thinner
Loin-eye area (cm²)	65.1 ^a	60.9 ^b	✓ 4.2 cm ² or 7% wider

The two groups differed carcass quality traits. The 1.3% higher lean proportion was mainly due to the larger loin-eye area, which was more than 4 cm² wider. The differences for lean proportion and loin-eye area were statistically substantiated, while the difference in back-fat depth was not. This higher loin-eye area might be directly attributable to the very good development of the young pigs in the BioAktiv group. A better carcass yield of 79% for the test group was recorded, compared to 77% for the control group. The relatively low yields of both groups were undoubtedly because the animals did not have empty stomachs.

The additional cost of using BioAktiv was about DM1.50 per pig. On average the extra revenue achieved was DM13 per pig. Therefore using BioAktiv had given a return on investment of more than $8 (13 \div 1.5)$.

Original report