

## TakTik® X-IN supplemented into creep feed improves intake, growth and health of piglets at weaning compared to a product blend

### INTRODUCTION AND OBJECTIVES

Weaning is a critical period for the piglet and commonly induces reduced intake and health problems such as diarrhea. Previous research demonstrated that SUCRAM® increases glucose absorption and intestinal structure while reducing diarrhea occurrence in weaning piglets. It is also known to improve intake. In addition, the dietary supplementation of anethole, a phytonutrient of XTRACT® range, is also known to have a beneficial effect on immune modulation.

TakTik® X-IN is a standardized intimate combination of these compounds specifically processed to target feed palatability and gut functions of piglets. Therefore the objective of this trial was to evaluate the effect of the supplementation of TakTik® X-IN in the creep feed on performance and health of piglets at weaning.

### MATERIAL AND METHODS

The trial was set up in the experimental facilities of a major Dutch feed producer.

- Every week, approximately 16 litters born, equally distributed over 2 dietary treatments.
- Piglets weaned at c.a. 27 days of age.
- Diets fed *ad libitum*:
  - Creep feed (2620 kcal/kg, 17% crude protein) from 5 days of age until 4 days post weaning,
  - Then standard a first starter diet for 9 days (2335 kcal/kg, 17.5% crude protein),
  - Finally a second starter diet (2355 kcal/kg, 17.5% crude protein).

Dietary treatment	Animals involved	From 5 days of age until 4 days post weaning	Starter diet 1 (8 days)	Starter diet 2 (up to 60 days of age)
Positive Control	70 litters (12.5 piglets /litter on day 5)	regular feed + butter vanilla flavor + taste enhancer with no sweetener	regular feed + butter vanilla flavor	regular feed + butter vanilla flavor
TakTik®	68 litters (12.3 piglets /litter on day 5)	regular feed + 200 g/t TakTik® X-IN 150, code B60-5640	regular feed + butter vanilla flavor	regular feed + butter vanilla flavor

- Measurements per litter up to weaning, then per pen (= 2 litters) for the first 4 days post weaning and afterwards per feeding valve (= 2 pens):
  - Performance parameters: feed intake, body weight, body weight gain,
  - Health status: mortality, medical treatments.
- Statistical analysis
  - GLM procedure for normally distributed data,
  - No statistics for health parameters.

# TECHNICAL BULLETIN

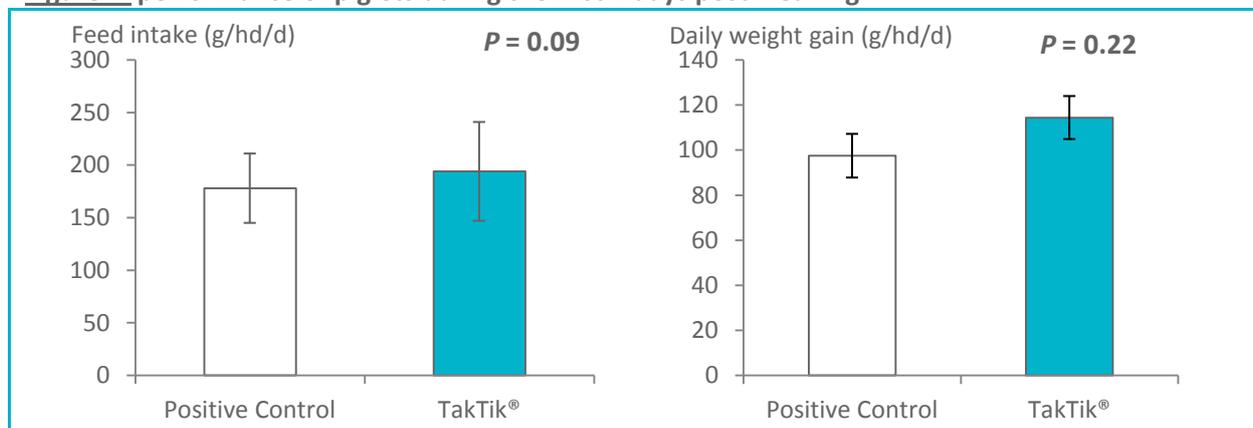
## RESULTS AND CONCLUSION

### Effect of TakTik® on piglet performance

**Before weaning**, there was no difference among treatments in terms of birth weight (mean 1.35 kg,  $P = 0.48$ ), weaning weight (mean 7.4 kg,  $P = 0.73$ ) and weight gain (mean 227.4 g/hd/d,  $P = 0.55$ ). In addition, TakTik® numerically increased creep feed intake compared to the positive control treatment (358 vs. 322 g/pig,  $P = 0.33$ ).

**After weaning**, during the first 4 days and compared to the positive control, TakTik® increased feed intake by 16 g/hd/d ( $P = 0.09$ ; Figure 1). In terms of growth, during this period, piglets fed TakTik® exhibited a weight gain enhanced by 16.9 g/hd/d ( $P = 0.22$ ). In addition, the coefficient of variation for body weight gain for these 4 days was smaller in TakTik® group than in the control (respectively 49.6% and 59.4%). This suggests that TakTik® enables a more even body weight gain among the pens.

**Figure 1: performance of piglets during the first 4 days post weaning**



Then, performance parameters were similar among treatments during the starter phase.

These results suggest that TakTik® is able to optimize piglets' performance during the weaning phase.

### Effect of TakTik® on piglet health

**During the whole trial**, there was no difference among treatments in terms of survival rate.

**After weaning**, the number of piglets treated for respiratory or intestinal problems was reduced when creep feed was supplemented with TakTik® instead of the positive control (respectively -6.6 and -10.7 points; Table 1).

**Table 1: percentage of weaned piglets treated with antibiotics**

	Positive Control	TakTik®
% treated for respiratory problems	11.40%	4.80%
% treated for intestinal problems (diarrhea, <i>E. coli</i> , ...)	17%	6.30%

This shows that TakTik® given in creep feed limits post weaning intestinal and respiratory disorders.

**The supplementation of TakTik® X-IN in creep feed improves intake and growth just after weaning, and reduces post-weaning respiratory and digestive disorders.**