



Butirex-C4 improves productive performance and intestinal parameters in fattening chickens

TAIWAN, 2013
PREM13-AV-BR-8



The inclusion of sodium butyrate in poultry diets has shown for several years the improvement in the intestinal maturity, pathogenic control and feed digestibility improvement, and reducing the intestinal disorders.

Method and Material:

- The trial was carry out in Taiwan (2013) with a total of 120-day-old chicks distributed in Control and Butirex C4 / VFA C4 group.
- Starter, grower and finisher diets were use based on corn-soya and the inclusion of Clinacox at 0.02%.
- The inclusion of Butirex C4 / VFA C4 was 0.2%, 0.15% and 0.1% in each diet respectively.

Results:

Body weight gain was higher in broilers fed with Butirex C4, especially in the initial periods (Table 1). Similarly, feed intake was higher with Butirex C4 in the initial periods. Feed conversion ratio was better with the inclusion of Butirex C4.

Table 1. Effect of Butirex C4 on productive performance

	0-14 d		15-28 d		29-39 d		0-39 d	
	Control	Butirex C4	Control	Butirex C4	Control	Butirex C4	Control	Butirex C4
BWG, g	19.71 ^b	23.96 ^a	65.03 ^b	76.44 ^a	98.73	95.78	58.27 ^b	64.27 ^a
ADFI, g	31.05 ^b	34.54 ^a	98.79 ^b	112.99 ^a	188.99	182.74	99.9	104.5
FCR	1.57 ^a	1.44 ^b	1.52	1.48	19.1	19.1	1.71 ^a	1.66 ^b

a,b : P≤0.05

The positive effect shown on productive performance could be related to the better intestinal development and health. Villi length was higher in broilers fed with Butirex C4, both in jejunum and in ileum (Figure 1). Also, the presence of E. Coli in both parts of the small intestine was lower in animals who were fed the diet supplemented with Butirex C4 (Figure 2).

Figure 1. Effect of Butirex C4 on villi length ($P \leq 0.05$ in both cases)

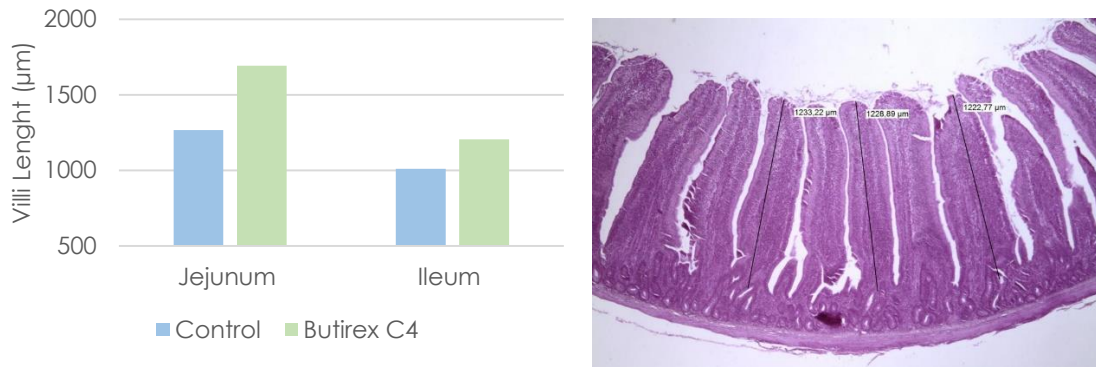


Table 1. Effect of Butirex C4 on *E. Coli* contamination ($P \leq 0.05$ in both cases)

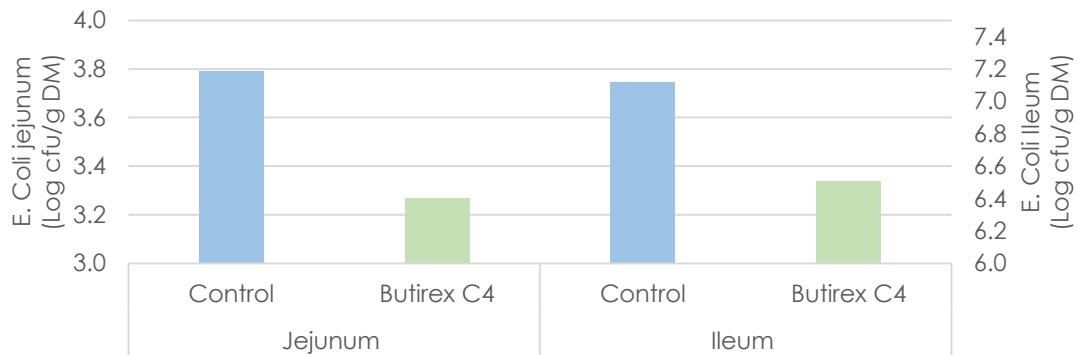
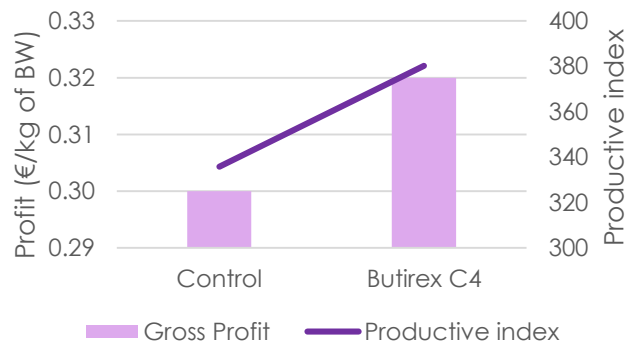


Table 1. Effect of Butirex C4 on economic performance

Benefit showed an increase of 0.02 €/kg of BW (+6.6%), and productive index, based on daily gain, conversion and mortality, was increased (Figure 3).



CONCLUSIONS: Butirex C4 improves productive performance of the chickens, related to the better digestive development and health, increasing productive benefit.