

Comparison of performance, digestibility of nutrients and quality of meat in four breeds of broiler rabbits

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In the first experiment 56 weaned rabbits, 30 d old, were assigned to one of four groups (14 rabbits each) on basis of the genotype (Hyla, Zika, Hyplus, Cunistar). These breeds are common in Czech commercial rabbitries at present. Rabbits were kept in stainless steel mesh cages, 2 per cage, at 16°C. In the second experiment 20 weaned rabbits of the same breeds were individually housed in metabolic cages in order to perform digestibility trials. Rabbits were fed a granulated feed mixture containing (%) : crude protein 14.8, fat 3.5, crude fibre 15.6, ash 6.7. Rabbits were killed at 80 d of age

and muscles from the leg removed for meat quality evaluation.

Differences among breeds tested were relatively small, although some of them were statistically significant. Rabbits of the Cunistar breed gained less than other rabbits and consumed more feed per 1 kg of gain. On the other hand the fibre digestibility in Cunistar rabbits was relatively high. In samples of meat of Cunistar rabbits both fat and cholesterol were elevated in comparison with other breeds. Fat and cholesterol content in rabbit meat was, however, generally low as compared with meat of other farm animals.

Results are summarized in the following table :

	Hyla	Zika	Hyplus	Cunistar
<i>Performance</i> ¹				
Avg. daily gain (g)	38 (41)	37 (39)	40 (40)	35 (36)
Feed conversion (kg/kg)	3.1 (3.4)	3.2 (3.6)	2.9 (3.6)	3.4 (4.0)
Final weight (g)	2679 (2961)	2647 (2847)	2552 (2890)	2550 (2772)
<i>Digestibility (%)</i> ²				
Crude protein	64.1 / 51.4	63.0 / 60.2	66.1 / 64.2	62.4 / 62.1
Crude fibre	24.0 / 13.5	21.6 / 18.9	20.3 / 21.0	30.6 / 24.6
<i>Meat composition (g/kg)</i> ¹				
Dry matter	273 (269)	255 (266)	264 (277)	272 (283)
Protein	210 (211)	208 (210)	209 (206)	208 (208)
Fat	45.9 (43.0)	31.8 ^a (39.6) ^a	39.2 (50.9)	47.7 ^b (55.0) ^b
Cholesterol	0.67 (0.60)	0.61 ^a (0.56) ^a	0.68 (0.69)	0.73 ^b (0.70) ^b
Hydroxyproline	1.59 (1.30)	1.35 (1.50)	1.48 (1.80)	1.58 (1.70)

¹ Values obtained in the second experiment are given in parentheses ;

² Values from the two trials.

^{a,b} Means within rows with different superscripts differ (P<0.05).