

# Comparison of the carcass characteristics and quality of different strains of capons <sup>(1)</sup>

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## Abstract

The purpose of this study was to compare the differences in the percentage of dressing, proportion of carcass parts and organs, skin and meat color values, muscle composition, physical properties, and sensory quality of capons of different body sizes and strains. The birds caponized at 10 weeks of age included 88 large birds (Zhubei Native Chicken) and 88 small birds (LRI Chicken T13) each of commercial red-feathered country chicken, raised by body sizes of different strains. The two groups of capons were provided with the same diet and incandescent light during the experimental period. Feed and water were provided *ad libitum*. Twenty-four capons of each body size were sacrificed randomly at 28 weeks of age. The results showed that the carcass weight, percentage of dressing, breast and thigh part, abdominal fat and intestine, protein and ash content, cooking loss, toughness and elasticity of breast muscle were significantly ( $P < 0.05$ ) greater in the capons of large body size, while the capons of small body size had a greater ( $P < 0.05$ ) percentage of head and neck, back and wing part, gizzard and heart,  $L^*$  and  $b^*$  values of thigh skin and breast muscle, fat content, and cohesiveness of breast muscle. Accordingly, the for tenderness and flavor in sensory score of large size capons were lower ( $P < 0.05$ ) than those of small size capons. In addition, our results also indicate that large (Zhubei Native Chicken) and small (LRI Chicken T13) commercial red-feathered country chicken have significant impact on the percentage of dressing, carcass parts and organs, skin and meat color values, muscle composition, physical properties, and sensory sore of capons.

Key words: Body sizes, Capons, Carcass traits, Meat quality, Skin and muscle colors.

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