Yields of two strains of broilers reared on pasture

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Pastured broilers in the US are typically slower growing Freedom Rangers (FR) and faster growing Cornish-crossed (CX), although little yield data has been collected from this production method. In each of two trials, 40 FR and 40 CX were obtained at 1 day of age and brooded together for 21 days, then transferred to pasture with water and supplemental feed (n=160). Birds were removed from feed and water, humanely slaughtered, and processed at 83 days for FR birds and at 64 and 71 days for CX birds in Trials 1 and 2, respectively. Although strain and age were confounded, it was necessary to obtain similar market weights. Carcasses were chilled overnight in ice water slush, cut into wings, legs, thighs, boneless skinless breast fillets and tenders, and frame (remaining carcass and breast skin). Parts and breast meat yield percent was calculated using chilled carcass weight as the denominator and multiplying by 100. Data were analyzed by trial due to significant trial and trial by strain effect. In Trial 1, FR strain had significantly (P<0.05) higher live weight (2819 vs. 2615 g), thigh yield (18.3 vs. 16.6%), and frame yield (35.1 vs. 33.7%) than CX strain, respectively; FR strain had lower carcass yield (65.7 vs. 71.7%) and fillet yield (14.6 vs. 18.0%) than the CX strain. In Trial 2, the FR strain had significantly lower live weight (2838 vs. 3098 g), and lower fillet yield (14.9 vs. 21.2%) and tender yield (4.5 vs. 5.5%) than the CX strain. The FR strain had higher yields for wing (12.0 vs. 10.9%), leg (14.8 vs. 13.9%), and frame (35.8 vs. 30.4%) than the CX strain. Data indicate older FR are similar to CX birds for most processed parts yields at similar market weights, but consistently have lower breast meat yields than CX carcasses.