SHORT COMMUNICATION

MEAT YIELD, QUALITY AND COMPOSITION OF THE BUSH FOWL (*FRANCOLINUS BICALCAETUS BICALCARTUS* L.)

By

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INTRODUCTION

Dawson *et al.* (1971) found that the dressed weight of bobwhite quail was 89% and 92.5% at 10 week and 18 week of age respectively; its ready to cook weight and boneless cooked meat yields were 71% and 80% of liveweight respectively. Its composite raw meat sample contained 20% crude protein. This study is designed to obtain similar information about another wild species of poultry, the bushfowl (*Francolinus bicalcaratus bicalcaratus* L.)

Forty-six live bushfowl were obtained from the derived savannah zone of the Western parts of Nigeria. The birds were slaughtered by neck dislocation, wet plucked, eviscerated and deboned. The edible meat was subjected to proximate analysis in accordance with the AOAC (1970).

The liveweight, plucked, carcass (plus giblet) and edible meat weights of the

bushfowl were 438.3 ± 15.8 g, 375.6 ± 17.5 g, 278.3 ± 12.3 and 242.0 ± 11.2 g respectively (Table 1). The last three were $85.7 \pm 4\%$, $63.5 \pm 2.8\%$ and $55.2 \pm 3.1\%$.

The percentage plucked weight of the bush fowl appeared lower than that of the domestic fowl (93 — 95%), possible due to a relatively greater amount of feathers which the bush fowl might require for aboreal existence. This factor might also account for the lower percentage carcass weight (63.5%) of the bush fowl than the domestic fowl (65—70%) whereas the bush fowl was less than the bob white quail in percentage plucked weight, their dressed weight percentage were comparable. The domestic fowl, the bush fowl and the bobwhite quail appeared similar in their percentages of edible meat of liveweights.

This study shows (Table 2) that the edible meat of the bush fowl compared with

TABLE 1
Liveweight, plucked weight, carcass weight and the
weight of edible meat of the bushfowl (N = 46)

Body Parts	Weights (Mean $\pm$ SD)	
	Absolute	As percentage of Liveweight
Whole	438.3 ± 15.8	—
Plucked	375.6 ± 17.5	85.7 ± 4.0
Carcass (Plus giblet)	278.3 ± 12.3	63.5 ± 2.8
Edible Meat	242.0 ± 11.2	55.2 ± 3.1

TABLE 2

Chemical analysis of the meat of the bushfowl in comparison with published data for domestic fowl

	COMPONENTS			
	Moisture (%)	Crude Protein (%)	Fat (%)	Gross Energy Kcal/g
Bushfowl	75.3	88.10 $\pm$ 1.0	5.7 $\pm$ 0.8	4.4
Domestic Fowl	76.0 ^b	73.0 ^c	21.2 ^c	5.4 ^c

b. Stewart and Abbott, 1961

c. Averages for White Rock, White Leg horn Rhode Island Red and the Nigerian Indigenous Fowl (Oluyemi and Oyenuga, 1971).

that of the domestic fowl in moisture content and tended to be lower in fat and in energy content. It is also higher in crude protein which might indicate a stronger muscle build for the bush fowl as this would be required for flight. The correlation estimate between the percentage crude protein or percentage fat of edible meat and the liveweight were 0.10 ± 0.16 and 0.21 ± 0.16 respectively, so that neither of these parameters increased significantly with the weight of the birds.

SUMMARY

Bushfowl averaged 438.3 ± 15.8 g in liveweight, 85.7 ± 4.0 , 63.5 ± 2.8 and 55.2 ± 3.1 in plucked car-

cass and edible meat weights respectively as percentages of liveweight.

The fresh edible meat contained $88.10 \pm 1.0\%$ crude protein, $5.7 \pm 0.8\%$ fat and 4.4 kcal/kg gross energy.

REERENCES

- A.O.A.C. (1970) *Official Methods of Analysis of the Association of Official Analytical Chemists*. 11th Edition.
- DAWSON, L.E., YORK, L.E., AMON, N.; KULENHAMP, C. and COLEMAN, T.N. (1971) *Composition and acceptability of meat from Bobwhite quail*. *Poultry Science*, 50: 1805—1810.