



Relevance of Dried Meat Product ('Kundi'), an Intermediate Moisture Meat (IMM), for Food Security.

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ABSTRACT: The goal of Food Security is for individual to be able to obtain adequate and quality food needed at all times and to be able to utilise the food to meet body needs. 'Kundi', an Intermediate Moisture Meat with high percentage of protein and highly nourished, is a good quality food, needed at all times to meet up with body requirement. 2kg of semimenbranous muscles from Camelus dromedarius and White Fulani were used. Samples were cut into sizeable pieces, boiled, and oven-dried in the laboratory and analysed in a completely randomised design. Fresh camel meat had 74.55% and 21.96% significantly ($P < 0.05$) higher in moisture and protein content than 72.69% and 18.96% of fresh beef. Protein content obtained for 'Kundi' products were inversely proportional to moisture content. In sensory evaluation results showed that, panelist rated beef 'Kundi' high significantly ($P < 0.05$) than camel 'Kundi', for tenderness, flavour, colour, juiciness, texture and acceptability with values of 6.50, 6.30, 6.50, 6.53 and 7.00 respectively.

INTRODUCTION: Food Security exists when all people at times have access to safe nutritious food to maintain healthy and active life (FAO, 1996). Three Pillars have been identified as affecting food security (World Bank 2001). These are Food availability, accessibility and nutritional factors. The problem of Food Insecurity especially in Nigeria is long standing. Meat and Animal products could make valuable contributions to diets of developing countries, due to its high nutritional qualities and excellent source of many nutrients. 'Kundi', is an examples of a dried meat product, which is readily accessible, available and of high nutritional value.

OBJECTIVE: The study assessed the Proximate Composition of fresh and dried meat products and their Sensory evaluation.

MATERIALS AND METHODS: Meat muscles were purchased and processed from Animal Science Department, University of Ibadan laboratory. Proximate composition was determined according to A.O.A.C. (2000), and Sensory evaluation was determined by the Panalists by rating samples on a nine point hedonic scale, in a completely radomized design

Table 1: Proximate Composition of MK, LPCK, LPBK (g/100gDM).

Parameters	Treatments			SEM
	MK	LPCK	LPBK	
Moisture	23.49 ^c	30.21 ^b	35.09 ^a	0.42
Ash	4.82 ^a	1.86 ^c	2.40 ^b	0.21
E. Extract	5.43 ^a	4.86 ^b	4.41 ^c	0.65
Protein	66.79 ^a	63.07 ^b	58.10 ^c	0.25

Table 2: Sensory Evaluation of dried Beef and Camel meat

Variables	Meat Samples		
	Camel meat	Beef	SEM
Tenderness	6.23 ^a	6.50 ^a	0.23
Flavour	5.90 ^b	6.30 ^a	0.56
Colour	6.30 ^a	6.50 ^a	0.28
Juiciness	6.40 ^a	6.53 ^a	0.40
Texture	5.90 ^b	6.30 ^a	0.17
Acceptability	5.90 ^b	7.00 ^a	0.29

RESULT AND DISCUSSION: Market 'Kundi' had the highest ($P < 0.05$) nutrient value with 66.79% of protein content than laboratory prepared camel 'Kundi' with 63.07% and 58.10% for laboratory prepared beef Kundi. These values obtained were observed to be greater than it fresh protein equivalent, of 21.96 % for camel and 18.95% for fresh beef. These findings agreed with the report of Egbunike and Okubanjo (1999) that Intermediate Moisture Meat are low in moisture content and contain three to four times the raw protein equivalent; hence they are less bulky. In table 2, Panelists rated beef 'Kundi' higher ($P < 0.05$) for flavour, texture and acceptability than camel 'Kundi', while meat tenderness, colour and juiciness had no significant value ($P > 0.05$) for both products. It therefore indicated that beef 'Kundi' products were highly preferred by the panelists than camel 'Kundi', the lower value obtained in camel 'Kundi' for overall acceptability could highly be due to strong odour or flavor and texture of camel meat, due to its high percentage of connective tissue in the muscle (Kurtu (2004)

REFERENCE: Egbunike G. N. and Okubanjo A. O. (1999). Effects of processing upon the quality of Nigerian meat products. Livestock production science (1999). Elsevier 155 -163.

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CONCLUSION: Study showed that dry meat products ('Kundi') is of high nutritional qualities, could be of a great relevance, to Food Security.