

# NIGERIAN SOCIETY FOR ANIMAL PRODUCTION (NSAP)



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# NIGERIAN SOCIETY FOR ANIMAL PRODUCTION

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# PROCEEDINGS 35TH ANNUAL CONFERENCE

Editors

O. J. Babayemi, O. A. Abu and E. O. Ewuola

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DEPARTMENT OF ANIMAL SCIENCE FACULTY OF AGRICULTURE AND FORESTRY UNIVERSITY OF IBADAN

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# EFFECT OF SEX ON CARCASS CHARACTERISTICS OF INTENSIVELY EX ON CARCASS CHARACTER (CAVIA PORCELLUS) REARED GUINEA PIG (CAVIA PORCELLUS)

\*S.S.A. Egena, A.H. Dikko, D.N. Tsado, A.A. Malik and H. Ibrahim<sup>2</sup> \*S.S.A. Egena, A.H. Dikko, Diversity of Technology, P.M.B 65, Minna, Niger State.

Department of Animal Production, Federal University Langi, Niger State <sup>2</sup>Ibrahim Badamasi Babangida University, Lapai, Niger State. \*Corresponding author: essa\_may25@yahoo.com and Developmient Issues 37

ABSTRACT

Twenty four (24) weaned non-pedigreed guinea pigs were used to investigate the effect of sex on carcass characteristics

Twenty four (24) weaned non-pedigreed guinea pigs were used to investigate the effect of sex on carcass characteristics Twenty four (24) weanea non-peatigreed guinett pigs were fed two diets ( $T_1 = low protein and high energy; <math>T_2 = high$  and some physical properties of meat. The animals were fed two diets ( $T_1 = low protein and high energy; <math>T_2 = high$ and some physical properties of medi. The distribution of the protein and low energy). The experiment lasted for 12 weeks. Parameters studied included: live body weight, slaughtered weight, eviscerated weight, dressing %, as well as the primal cuts and internal organs. Results showed that live body weight, eviscerated weight, aressing with dressing with head, hind leg, fore leg, abdominal region, intestinal weight, weight, slaughtered weight, eviscerated weight, dressing with head, hind leg, fore leg, abdominal region, intestinal weight, heart and lungs were all significantly (p<0.05) affected. It was concluded that sex has an effect on the carcass Gloria, E. A. and Tanker, A. I. (1962) educhory of characteristics of guinea pigs.

## INTRODUCTION

National Research Council (1991) defined microlivestock as inclusive of species that are inherently small such as guinea pig, rabbit, poultry as well as breeds of cattle, sheep, goat and pigs that are less than half the size of most common breeds. There is increasing awareness of the role this class of livestock can play in increasing the choice of animal protein to the Nigerian populace. Jokthan et al. (2006) posited that increased guinea pig and pigeon production could help bridge the supply-demand protein gap and fit the production system for subsistence meat production in Nigeria. Guinea pigs can easily be raised by the rural poor as a means of income and also protein. The animal can easily be reared by resource poor peasants who according to Jokthan et al. (2006) are outside the cash economy and hence are unable to purchase meat, milk and egg produced by the conventional livestock. The demand by the animal for housing and feed is minimal. Morever, because its management is not a labour intensive enterprise, it is women and children who usually care for them on small farms (Huss and Roca, 1982; Charbonneau, 1988). Ngoupayou (1992) reported that their production in some semi-urban (and peri-urban) areas of Cameroon is a backyard or secondary activity carried out by women and their children.

Sex dimorphism exists among animals as it improves competitive ability and greater opportunity for breeding (Renecker and Hudson, 1997; Gatford et al., 1998). It is possible that such sex dimorphism also exists in the guinea pig and might have an effect on its carcass. The aim of this study therefore was, to determine the effect of sex on carcass characteristics of guinea pig.

# derly Herricord - trainstant benel MATERIAL AND METHODS

Environmental Sciences

Twenty four weaned guinea pigs (N = 16 males; N = 8 females) were used for the study. The guinea pigs were sourced locally from within Niger State (Kagara Kotangora and Gwada). They were randomly allotted to two treatments diets each with three replicates of four animals. Treatment 1 guinea pigs were fed a low protein high energy diet (16%CP; 3187.18Kcal/Kg) while those in treatment 2 were fed a high protein low energy diet (22%CP; 2864.81Kcal/Kg). The concentrate diets were supplemented with Tridax procumbens and mango leaves. At twelve weeks, three male and three female animals were selected for carcass analysis. The selection was done in such a way that females and males were taken from each treatment in order to minimize the effect of the diet. The selected animals were kept off-feed for 12 hours and slaughtered the next day by severing the jugular vein. The slaughtered animals were hung upside down to ensure proper bleeding under gravity. The bled animals were then scalded in hot water at 80°C to ensure the complete removal of the fur. The scalded animals were then eviscerated, wrapped in polythene bags and tel bags and taken to the laboratory for further analysis.

Physical and taken to the laboratory for further analysis. Physical properties of meat evaluated included holding cooking yield, cooking loss and water holding

Data were recorded in grams (g) and expressed as mean and extend Means mean and standard error of mean (±SEM). Means were compared were compared using t-test (MINITAB, Values of process Values of p<0.05 were considered significant.

Table 1: Effe	ct of sex on	carcass characteristics of guinea nig
maining : T	Male	characteristics of guinea nig

). Raising for meat produc	Mean (±SEM)	Female Female
Trait	460 00 110 00F	Mean (±SEM) Significance
Live weight (g)	460.00±10.00ª	440.00±40.00 <sup>b</sup> Significance
Slaughter weight (g)	437.50±2.50°	415:00±35.00b
Eviscerated weight (g)	295.60±0.00ª	280.00±20.00b
Dressing %	66.04±3.63ª	19×163.75±1.25b1 N .91bul *
THE PROPERTY OF THE PROPERTY OF THE PARTY OF	I.A. animals will	Forcet, J.C., radige, w. C. deaun Dubudure,
Cut-up parts (% of live weig	ht) obnosta pos	(eds). Principles of Meat Science, Daniel
the state of the s	11.74±0.29ª	Rendall/Hunt Publishing Company, FP
haleading carea squire	11.72±0.46b	10.42±0.41 <sup>b</sup> *
Fore legande to contention	12.29±0.03b	13.20±0.74*
Hind leg	1071 207	12.80±0.14 <sup>a</sup> *
Thoracic region	12.89±2.79	13.84±0.66 ns
Abdominal region	12.53±0.02 <sup>b</sup>	14.38±0.49*
Intestinal weight	11.17±0.51	11.62±1.86 ns
Alazin Juanamia adum mani		than, G.E., Akpa, G.N. Duru, S., Yas
Internal organs (% of live w	eight) The To the	S.M. and Hussein, E. (2006). The role
of the Amircal Science than Heigh		numit c value of guinea of 10.0±08.0 perce
M Liver di redmente 15.m	81 .prise: 3.87±0.08	in 4.04±0.26 in signation in ins in
A A STATE OF THE S	0.69±0.05 <sup>b</sup>	0.85±0.01ª
Lungs	0.90±0.11	0.88 ±0.13 ns
Kidney (7.005)	The same of the sa	The state of the s
* significant (p<0.03)	nher Biochergen	Association of Nigerial 18"-21" Septen
ns = not significant (p>0.05)	a Calemanamana a managar da	Ibadan, Ill. eria, Pp. 195-197.

Table 2: Effect of sex on cooking yield, cooking loss and water holding capacity of guinea pig meat (%)

Effect of sex off cooking y	Male Mean (±SEM)	Female Mean (±SEM)	Significance
Parameter	87.99±3.73	89.57±0.30	ns
Cooking yield Cooking loss	12.02±3.73	10.43±0.30	ns *
Water holding capacity	16.18±0.28 <sup>a</sup>	15.17±0.56 <sup>b</sup>	

\* significant (p<0.05) ns = not significant (p>0.05)

# RESULTS AND DISCUSSION

Means and standard error associated with each of the variables measured for males and females are presented in Table 1. Males were higher (p<0.05) in live weight, slaughter weight, eviscerated weight and dressing % than females. Male animals generally tend to be bigger than females and this is reflected in the result obtained in this study. The result observed for the slaughter and eviscerated weight are reflections of the higher body weight of the males. Both male and female animals had high dressing % which goes to show that very little of the meat is wasted. With the exception of the thoracic region and intestinal weight, all the cut-up parts were significantly affected (p<0.05). Males had bigger head but smaller fore legs, hind legs and abdominal region. Males also had bigger (p<0.05) heart but smaller lung compared to the females.

Table 2 reflects the effect of sex on three physical properties of guinea pig meat evaluated (cooking yield resity). Females cooking loss and water holding capacity). Females had higher (p>0.05) cooking yield and a males land ingner (p>0.05) cooking loss compared to the males. Males had a higher (p<0.05) water holding

capacity than females. Water holding capacity is the ability of meat to retain its water (Hedrick et al., 1994) and is an important assessment of meat quality. Water holding capacity has a direct relationship with most other qualities such as flavour, juiciness and tenderness (Omojola, 2006). It is expected therefore that meat obtained from male guinea pigs will be juicier, tenderer and have a better flavour than that obtained from the female. An inverse relationship has been established between fat and water content (Okeudo and Moss, 2005). This means that the more the fat, the lower the water content and vice versa. This explains the lower water holding capacity of meat from female guinea pigs.

The result of this work indicates that sex had an CONCLUSION effect on the carcass characteristics of guinea pig.

Charbonneau, R. (1988). Fiesta for six: one guinea pig. IDRC Reports. July. Pp: 6-8.

Gatford, K.L., Egan, A.R., Clarke, I.J. and Owens, P.C. (1998). Sexual dimorphism of the

somatotrophic axis. Review. Journal of Endocrinology 157: 373-389.

Hedrick, H.B., Aberle, E.D., Forest, J.C., Judge, M.D. and Merkel, R.A. (1994). Properties of fresh meat. In: Hedrick, H.B., Aberle, E.D., Forest, J.C., Judge, M.D. and Merkel, R.A. (eds). Principles of Meat Science. Dubuque, I.A. Kendall/Hunt Publishing Company. Pp. 123-131.

Huss, D.L. and Roca, G. (1982). Small animals for small farms: The Guinea pig and a hypothetical development centre. FAO Regional Office for Latin America. Santiago, Chile.

Jokthan, G.E., Akpa, G.N., Duru, S., Yashim, S.M. and Hussein, F. (2006). The role and nutritive value of guinea pig (Cavia porcellus) and pigeon (Columbia livia) in animal protein supply in Kaduna State. Proceedings of the 11<sup>th</sup> Annual Conference of the Animal Science Association of Nigeria. 18<sup>th</sup>-21<sup>st</sup> September. Ibadan. Nigeria. Pp: 195-197.

MINITAB (2003). Minitab statistical software, release 14 for windows, state college, Pennsylvania, USA.

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Ngoupayou, J.D. (1992). Guinea pig (Cavia porceluus L.). Raising for meat production: Research on feeding and monitoring of raising Guinea pigs in villages in Cameroon. In: Micro. NRC (1991). Micro livestock: Line NRC (1991). Micro livestock: Line

NRC (1991). Micro livestock: Little-known small animals with a promising economic future.

Okeudo, N.J. and Moss, B.W. (2005), Interrelationships among carcass and meat quality characteristics of sheep. Meat Science 69:1-8.

Omojola, A.B. (2006). Yield and organoleptic characteristics of "suya"-intermediate moisture meat prepared from three different muscle types of a mature bull. Proceedings of the 11th Annual Conference of the Animal Science Association of Nigeria. 18th-21st September. Ibadan. Nigeria. Pp. 311-314.

Renecker, L.A. and Hudson, R.J. (1997).

Bioenergetics and resource use. In: Hoofed mammals of Alberta. Stelfox, J.B. (ed.). Lone Pine Press. Edmonton, Canada. http://www.deer.rr.ualberta.ca/library/bioernergetics/Bioenergetics.html

Cooking loss

Water bolding capacity of a selection of 16.18±0.28°

Typic significant (p<0.05) a selection of 16.18±0.28°

The significant (p>0.05) a selection of 16.18±0.28°

The significant

Cooking vield 1, 18 1, 19 1, 1

capacity than females. Water holding capacity is the ability of meat to retain its water (Hedrick et al., 1994), and is an important assessment of meat quality. Water holding capacity has a direct relationship with most other qualities such as flavour, juiciness and tenderness (Omojola, 2006). It has expected therefore that meat obtained from other guinea pass will be juiciet, tendotes and have a better guinea pass will be juiciet, tendotes and have a better than that obtained from the female. An inverse relationship has been established between tat and water content (Okeudo and Mass, 2003). This inverse that the more the fat, use lower the water content and vice versa. This explains the lower water holding capacity of mean from female summen page.

CONCLUSION (and this work indicates that see had an alter on the case as characteristics of guiner pigned on the case as characteristics of guiner pigned on the case as characteristics of guiner pigned on the case at the case of guiner pigned on th

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MORSHORIC AND DISCUSSION were and standard error associated with each of the realles neusured for males, and females, are retend a Table 1. Males were higher (p<0.05) in reventaging her weight, eviscerated weight and tion tentales. Maie animais generally to a little than temples and this is reflected in boyrased in this study. The result observed the land eviscerated weight are estign ad to tagiow who body weight of the maids. " and counte animals had high oresstones" at depart that very little of the meat is delign of the thorsese region " seed the sit the cut-up parts were telegid (pero.05). Males had bigger lanimobile box agel bond and abdominal i die had bigger (p<0.05) begrt but and to the formales. tioning of region, three, physical genicos), baltalisve trom giq routing lysicand water holding canantyle a bus bisiv encloss (20.0<q) origin to

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attibled a higher (ped.03) water holding