دراسة عن تصافى وتشافى الجاموس بمجزر القاهرة

الدكتور / محمود زيدان والدكتور / محمد فؤاد صديق والدكتوره / سوسن رشدى

الملخص

تم ذبح ٨٠ رأسا من ذكور الجاموس بمجزر القاهرة وقد تم حساب نسب التصافى والتشافى لثلاثة مجاميع باعمار ١٥ – ١٨ – ٢٤ شهرا . وقد كان متوسط نسب التصافى لهذه المجموعات هى ١ر٤٨ ، ٣ر٥٠ ، ٤ر٥١ ٪ على التوالى . أما متوسط نسب العظام بكل منها هو ٤ر١٧ – ٥ر١٧ – ١ر١٧ ٪ .وقد أسفرت الاحصائيات الحسابية أن سن ٢٤ شهرا قد أعطى أعلى نسبة من عائد اللحوم التى وصلت الى ٨ر٧٢٪ . فى حين أن سن ١٥ شهرا أنتج أعلى نسبة من الأجزاء الممتازة (فلتو – أنتركوت – تلبيانكو) . وقد اشتمل البحث أيضا على نسب أنواع العظام المختلفة من مواسير – ومفلطح – وفقرات . بلغت نسبة فقد اللحوم ما بين ٥ر١ – ٣٪ من وزنها بعد تعرضها للتبريد لمدة ٤٦ ساعة .

From the Dept. of Food control, Faculty of Vet. Med. Cairo University
(Head of the Dept. **Prof. Dr. A. W. Morsy**

SOME STUDIES ON CARCASS YIELD OF SLAUGHTERED BUFFALOES IN CAIRO ABATTOIR

By

M. Zeidan,* M.F. Sedik and S.A. Roushdy

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SUMMARY

A total number of 80 male buffaloes were slaughtered in Cairo abattoir to study the carcass yield at different ages. The animals were divided into 3 groups of 15, 18 and 24 months old. The best meat gain (72,8%) was achieved from animals at 24 monhs old. The 15th months aged calves produced relatively higher percent ages of 1st grade retailer cuts i.e. psoas, intescostal and semitendinosus muscles. Percentage of bones to the carcass was 17.4, 17.5 and 17.01 for the different examined groups respectively. The study included also the different percentages of long bones, flat bones and vertebrae. The loss during chilling amounted to 1.5 — 3.0%.

INTRODUCTION

Production of beef in Egypt cannot cope with the increasing needs of pouplation. The inadequacy of beef is a problem which can only be solved through efficient production and improving marketing conditions.

It is estimated from the records available that about 387885 Buffaloes are slaughtered annually in Egypt producing about 33595.8 tons of meat (ZEIDAN, 1971). Inspite of this low figure of meat production most of the breeders and butchers insiste to get rid of the male calves 40 days old by slaughterning instead of rearing them to a suitable age to gain more meat. Studies concerning determination of the suitable age for slaughtering beef cattle and buffalces to increase the meat gain are very scarce in Egypt.

From the economic point of view, it is required to have an animal which yield a high percentage of meat i.e. an animal which the proportion of the offal parts the head, feet and intestine, is small.

So this work was done to find out the carcass yield of slaughtered Egyptian buffalce males at different ages regarding the quality of meat and the economic aspect of production.

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* Meat trade Company.

MATERIAL AND METHODS

Eighty male buffaloes of different ages were chosen and grouped as follows:

Group one : 36 animals of 15 months old.

Group two : 28 animals of 18 months old.

Group three : 16 animals of 24 months old.

The animals were fastened for 16 hours, weighed and then slaughtered.

Dressing and evisceration were conducted as usual. The following parts of the carcass were detached :

(*a*) The skin and tail without the cauda fat.

(*b*) The head (cut between the occipital bone and cerivcal vertebrae)

(*c*) The thoracic, abdominal and pelvic organs with the heart fat and mediastinal fat.

(*d*) The legs below the tibio-femural articulation.

(*e*) The blood vessels along the vertebral column with the attached tissues tendinous portion of the diaphragm. Oesophagus and traches.

(*f*) Genital organs.

(*g*) Spinal cord.

RESULTS AND DISCUSSION

The dressing out percentages of the different groups were 48.1, 50.3 and 51.4 respectively (the table). The best gain was obtained from animals at 24 months old. At this age buffaloes may have relatively well muscular development as compared with that in the other groups. El-AFIFI (1963) reported a carcass yield of 47.5% in case of cattle males at 21 months old. He added that the mean carcass yield of males at 39 month old was 48.7. He concluded that althought the carcass yield was comparatively unprofitable for the producer as such meat is marketed at low price (old). Chilling for 24 houres was also studied. A definite loss in weight (1½—3%) occured in all of groups of carcass after the three being chilled for 24 hours.

The loss was significant (p.0.05) in the younger group. Such findings, with higher percentage, were recorded by THORNTON (1970). The higher percentage reported by RASSMUSSEN (1931) may be attributed to difference in treatment and enivronmental conditions. The weight percentage of first

TABLE 1. Average Weights of carcass, normal meat, excellent parts and bones of 80 male buffaloes

Groups / number	Live WT.	Carcass WT.	Dressing %	Chilling %	Loss of Wt. %	Normal meat	Excellent parts			Total	Kidneys	Average Wt. of bones			Total
							Ps. M.	Int. M	S.M.			long	Flat	Verteb. -rae	
I (36) . . .	407.36	195.78	48.1	189.76	3.0	137.42	3.51	10.19	3.68	17.38	1.95	14.34	7.88	10.78	32.96
	±4.17	±1.76		±2.20		±4.97	±0.05	±0.26	±0.06	%9.15	±0.09	±0.17	±0.17	±0.20	%17.3
						%72.41	%1.84	%5.68	%1.94		%1.02	%7.56	%4.11	%5.68	
II (28) . . .	441.32	220.77	50.3	217.36	1.5	157.22	4.31	10.96	4.24	19.51	2.79	16.23	9.55	12.8	38.58
	±11.39	±3.79		±1.67		±1.84	±0.09	±0.37	±0.20		±0.12	±0.19	±0.17	±0.14	
						%72.33	1.89	%5.05	%1.95	%8.9	%1.20%	7.47%	4.39	5.55	%17.7
III (16) . .	486.5	249.80	51.4	245.83	1.6	178.70	5.44	12.14	4.77	22.97	3.06	16.99	10.77	13.96	41.72
	±4.87	±3.28		±3.25		±4.62	±0.68	±0.34	±0.14		±0.14	±0.10	±0.17	±0.22	
						%72.88	%5.44	%4.94	%1.94	%9.1	%1.24	%6.39	%4.39	%5.69	%17.

∓ Standard error.
Values are expressed in kilograms.
Ps. M. Psoas moscle.
Int. M. Intercostal muscle.
S.M. Semitendinosus muscle.

grade retailer cuts (intercostal, psoas and semi-tendinosus) in relation to the total carcass weight given in the table, points out that the best yield for these parts (9.1%) could be obtained from calves of the first group (15 months old), however the difference in the other two groups were insigiinficant.

Kidneys with the perinephric fat, constitute 1,02—1,24% of the carcass weight. El-AFIFI (1963) reported in this respect a percentage of 0.91% for the kidneys in balady cattle (2 months). This difference may be due to weighing the kidneys without the surrounding fatty tissues.

Bones (long, flat and vertebrae) comprised 17.4, 17.5 and 17.01% for the three groups respectively. Variable results ranging between 15.1 and 28.3% were reported by OSTERTAG (1938), STEGEN (1951) and SCHÜLLER (1958).

The results achieved allow the conclude that in order to increase meat production, concerned authorities should stipulate regulations to prohibit slaughtering buffalo calves below two years old.

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Authors Adress : Dr. M. A. Zeidan : Meat Trade Company, Cairo - Egypt.