

CHARACTERIZATION OF RABBIT MEAT MIDDLEMEN IN THE METROPOLITAN AREA OF MEXICO CITY

OLIVARES R¹., SORIANO R²., LÓPEZ M²., RIVERA J²., LOSADA H².

¹CIESTAAM (Centro de investigaciones económicas sociales y tecnológicas de la agroindustria y agricultura mundial). Km. 38.5 Carretera Federal México-Texcoco. Chapingo, Estado de México. México, 56230
rolivares77@hotmail.com

² Departamento de Biología de la Reproducción. Universidad Autónoma Metropolitana Iztapalapa.. Av. San Rafael Atlixco 186. Colonia Vicentina. México D.F. 09340;
ramon@xanum.uam.mx

ABSTRACT

Structured interviews composed by 21 questions were applied to seven rabbit middlemen in order to study their procedures in the purchase and sales process. Middlemen bought rabbits up from four farms. A percentage of 57.1% of middlemen purchased more than 100 animals per week, 14.3% of them purchased 50 to 100 animals and 28.6% of them only 20 to 50 rabbits. Purchasing and then selling rabbits showed a different pattern. Two middlemen sold 20-50 animals per week; five of them sold more than 100 animals a week. Two thousand one hundred and eighty animals were purchased by middlemen, while sales reached 2,280 rabbits per month. Although middlemen preferred rabbit rose in farm, the consumption of rabbit raised in backyard production system was important in absolute terms. Only 28.6% of the middlemen obtained in the desired volume of the product trough the whole year while the remaining 71.4% of them found low consistency in the supply of product.

Key words: Rabbit meat, Mexico City, middlemen.

INTRODUCTION

Although official figures do not exist, the Metropolitan Area of the Mexico City (ZMCM) is, without a doubt one of the main points of the consumption of rabbit meat in the country. Rabbit meat has well known nutritious characteristics (low cholesterol, high protein). Additionally, rabbit production systems in Mexico have a potential for being sustainable. Despite the two previous facts, the lack of information on diverse aspects of rabbit production in Mexico is a problem to be investigated. One of the most notorious gaps of information regarding rabbit production in Mexico is how the consumption of rabbit meat is carried out in the ZMCM. The objective of this paper was to study the consumption pattern of rabbit meat in Mexico City and in its conurbation.

MATERIAL AND METHODS

To have a wider understanding of the commercial characteristics of rabbit meat, information was requested of consumers by means of a survey. The survey was applied aleatorily in a study area that included 12 districts of the Mexico City and 4 municipalities of its conurbation; selected aleatorily (CASTRO, 1997). Once the areas of study were selected, a sample within these was taken and then the questionnaires were applied. The selection of the interviewees was random, following the interception of sample unit's technique. Sample size was established in 784 surveys, therefore to prevent the omissions or lack of answers, 800 samples were taken. Likewise, it was determined a number of 50 consumers per district or municipality to be interviewed (SCHEAFFER *et al.*, 1990). Regarding middlemen, seven interviews were applied to them. Contact was established with middlemen directly in the farms at the moment of purchasing the animals. A survey composed of 21 questions was applied to obtain information. The survey was focused on commercial aspects such as purchase points and trade of the product, purchase presentation, price and restrictive aspects (SCHEAFFER *et al.*, 1990). Data were analyzed by means of descriptive statistic and central tendency measures and the results were expressed as percentages of the analyzed sample (WEISS and HAZTE, 1991).

RESULTS AND DISCUSSION

Of the middlemen interviewed, 57.1% bought animals from less than three farms, while 42.9% of them bought rabbits from more than 4 farms. All the people selling rabbits were also producers. A percentage of 57.1 of middlemen purchased more than 100 animals per week, 14.3% bought 50 to 100 animals and 28.6% only bought 20 to 50 rabbits. Contrary to the expected, selling the product showed different way to its purchase. While only 28,6% of the middlemen sold 20-50 animals per week, the remaining 71.4% of them marketed more than 100 animals per week. This indicates the existence of a retention period of animals within facilities owned, rented or lend by middlemen. This might be explained by different reasons, among which, we can mention; market conditions (saturation or depression) or timing to obtain better prices (Table 1).

In order to estimate the number of rabbits consumed per month, we consider an intermediate value in the established ranges of purchase of animals. Thus two middlemen would be buying an average of 35 animals a week. One middleman purchase 75 rabbits per week, the remaining 4 of them acquire at least 100 animals per week. Adding the weekly consumption of all of the middlemen it results that they buy at least 545 rabbits. Thus would imply (assuming constant consumption) at least 2,180 animals per month. If we perform a similar estimation for the animals are sold per week, two middlemen would sell all the 35 the rabbits that buy a week, however the remaining 5 middlemen sell at least 100 animals a week, what would imply a volume of 570 rabbits per week or 2,280 per month. The difference between the animals that are bought and those that are sold can be explained if at least one of the interviewed middlemen is actually producing part of the rabbit that they sell. Another possible explanation could be

the accumulation of rabbits in the facilities of the middlemen, as it was mentioned before. Not all of the middlemen knew the place of origin of the rabbit that they sold. Although it is a fact that some of them bought directly from the farms, while the others receive the product in their facilities. At this respect, rabbits might come from the neighbouring provinces of Mexico (50%), Tlaxcala (33.3%) and Puebla (16.7%).

Table 1. General aspects of purchasing and selling live rabbits by middlemen.

Aspect	Number
Number of farms where middlemen buy the rabbit	
1-3	4
4 or more	3
Total	7
How many of the farms produce the animals that you buy?	
All	7
How many animals do you purchase per week?	
From 21 to 50	2
From 51 to 100	1
More than 100	4
Total	7
How many animals do you sell per week?	
From 21 to 50	2
More than 100	5
Total	7
Do you know where the rabbit that you buy is produced?	
Yes	6
No	1
Total	7
In which province?	
State of Mexico	3
Puebla	1
Another:Tlaxcala	2
Total	6

Although middlemen preferred rabbits rose in farms, the consumption of rabbit raised in backyard production system was important in absolute terms. However, in relative terms its importance is not appreciated (5%). 57.1% of the middlemen marketed both rabbit types. The meat characteristics of rabbits raised under extensive, intensive or semi-intensive conditions were different and this might have favoured that 85.7% of the consumers prefer rabbit rose in farm, for its flavour (28.6%), size (28.6%) and the carcass quality (28.6%) (Table 2).

Table 2. Origin of rabbits bought by middlemen and carcass quality preferences by consumer.

Aspect	Number
The marketed rabbit comes from:	
Farm	2
Backyard production system	1
Both	4
Total	7
Your clients prefer rabbit from?	
Backyard production system	1
Farm	6
Total	7
Reasons why farm rabbit is preferred	
Price	1
Flavour	2
Size of carcass	2
Carcass quality	2
Total	7
Weight at purchase?	
Less than 2 kg.	1
2.00 to 2.3 kg.	4
More than 2.3 kg	4
Total	9

The purchasing weight was varied, since 44.4% of the middlemen preferred rabbits of 2.0-2.3 kg, while 44.4% of them preferred 2.3 kg or more, and 11.2% of them preferred less than 2.0 kg. (Table 2).

In relation to the sale and purchase prices, generally it was paid less for the rabbit sold live. However, this was the favourite for the middlemen, since they can store the animals, thus regulate the market and they can also give added value to the product by slaughtering and processing the rabbits thus increasing his gain margins. The price range of rabbit varied for living animals sold by the farm between 1.0-1.6 USD/kg. On the other hand, middlemen sell living rabbits for 1.45-1.95 USD/kg. Processed animals (slaughtered and skinned) were a common presentation for the consumer and price ranged from 3.23 and 3.45 USD/kg. However places exist where the kilogram of meat reaches 4.09 USD (supermarkets). The main clients of the middlemen are the restaurants (48.8%), the public in general (36.5%), and in smaller grade butchers (14.7%). However, some middlemen sell to market places, tianguis and self-services.

The main characteristics that the consumers looked for when buying rabbit meat were loin thickness (57.1%), and the size of the animal and the price (28.6%, for both characteristics). The colour and the weight were the less important characteristics for the consumers (14.3%) (Figure 1).

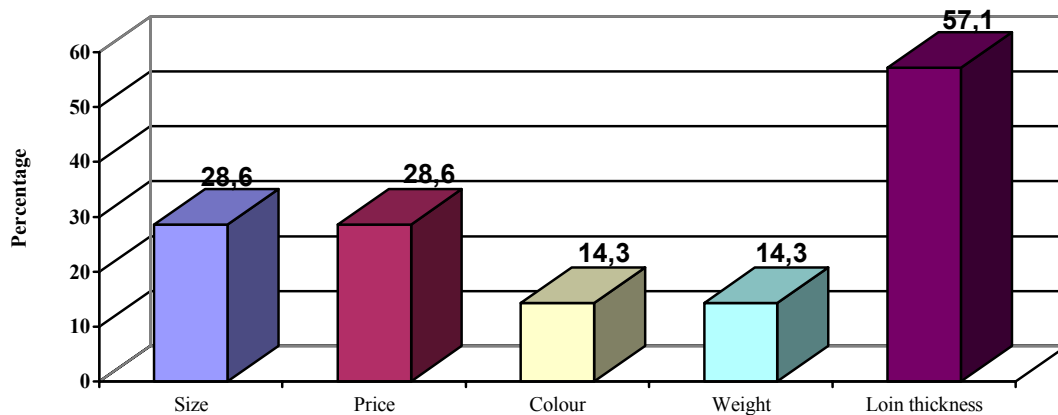


Figure 1. Characteristics of the product that clients prefer at the moment of purchase.

Only 28.6% of the middlemen obtained the desired volume of the product through the whole year, while the remaining 71.4% of them argued a lack of consistency from part of the producers in the supply of the product.

The main constraints to the sale of rabbit from producers to middlemen included sanitary problems (40.0%). This impact is higher due to the lack of training of the producers, however it could be minimized only by simple practices of handling the animals. This situation originates a bad scheduling (20.0%) of the production with the consequent shortage of the existences in the market.

The low consumption of rabbit meat was due to the existence of few selling points (28.6%) and to the lack of knowledge of the nutritional and culinary qualities of the product (71.4%), while the price did not represent an obstacle for its consumption.

CONCLUSIONS

Middlemen played an important role in the distribution of rabbit meat in the metropolitan area of Mexico City. These intermediaries bought rabbits from farms or family backyard production systems and sold it to restaurants, superstores and others. The number of rabbits bought and sold by middlemen was different, which suggested that there is a retention period of animals in facilities owned, rented or lend by middlemen. This might be explained by different reasons, such as, market conditions (saturation or depression) or timing to obtain better prices. Consumers preferred rabbits produced in farms to those reared in the backyard production system. Consumers preferred animals with good carcass quality, carcass size, flavour and specially the size of the loin.

Middlemen connect producers to the market, but they can also be producers. A policy intervention to encourage rabbit production in the ZMCM would imply the consideration of the knowledge that middlemen have of the market.

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REFERENCES

- CASTRO C.C. 1997. Mercadotecnia. Facultad de Contaduría y Administración. Universidad Autónoma de San Luis Potosí. S. L. P., México.
- SCHEAFFER R.L., MENDENHALL W., OTT L. 1990. Elementary survey sampling. *Fourth edition. PWS-Kent. Boston, Massachusetts*
- WEISS N.A., HASSET M.J. 1991. Introductory statistics. *3rd. Ed. Addison-Wesley publishing Company. Massachusetts-New York.*