THE POTENTIALITIES AND CHALLENGES OF RABBITARY IN NIGERIA: A REVIEW

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ABSTRACT

This study was a review of potentialities and challenges of rabbitary in Nigeria. From the study, it was discovered that cooked rabbit meat has high nutritional value with high protein content, low fat, and low in cholesterol, sodium and calories and contains phosphorus, iron, zinc, riboflavin, thiamin, vitaminB12 and niacin making it ideal meat for hypertensive patients. In alleviating the problem of animal protein supply in developing countries, it was recommended that farmers should practice rabbitary and governments on their part should encourage the rabbit farmers by making funds available through granting of loans and other incentives.

Keywords: *nutritional values, challenges, hypertensive patients, potentials, opportunities, rabbitary.*

INTRODUCTION

Livestock production is a socio-economic activity that could lead to improved income and raise the quality of living of Nigerians (Chukuigwe, Week and Owen, 2008; Akinola, 2009). There is a global awareness on the level of shortage of animal protein supply in the tropic (Adekunle and Ajani, 1999). Nigeria remains among the least consumers of animal protein in the world (Egbunike, 1997). Average consumption of animal protein in this country is estimated at 4.5g/head/day as against a minimum requirement of 35g/head/day recommended by the Food and Agricultural Organisation of the United Nations (Atsu, 2002). The myriad attempts aimed at solving low protein intake and poverty alleviation by Nigerian government still remain a mirage (Nworgu and Hammed, 2009). To meet the increasing demand for animal protein, emphasis needs to be given to non-conventional sources such as easily managed rabbits as against the conventional sources such as cattle, sheep, goat, pig and poultry that would require more capital, space and time (Berepubo, Owen, Monsi, Oji and Chukuigwe, 1995; Yusuf, Garba, Olafadeham, and Okafor, 2009).

Rabbit production is being encouraged in Nigeria as a means of improving the daily protein intake of individuals (Ekpenyong and Bioaku, 1986). Exotic rabbits are assuming prominence in an effort to alleviate the supply-demand of animal protein in Nigeria. The extent to which such efforts succeed will depend on how well local and other management practices can be put in place to ensure optimum performances (Berepubo, Owen, Monsi, Oji and Chukuigwe, 1995; Ukachukwu, 1997; Owen, Chukuigwe, Amakiri and Aniebo, 2008; Owen, Amakiri and Ngodigha, 2009). The aim of this paper is to review different scholars' views on rabbit production in Nigeria with a view to enlightening the public on the potentialities and challenges of rabbittary.

RABBITRY IN NIGERIA: THE POTENTIALITIES

Rabbitary, the science and occupation of raising rabbits for food, can be regarded as a new breed of animal farming in Nigeria with its potentialities, opportunities and challenges. The potentialities of rabbit rearing are that the cooked meat has a high nutritional value with high protein (56%), low fat (9%), low in cholesterol, sodium and calories (8%) and contain 28% phosphorus, 13% iron, 16% zinc, 14% riboflavin, 6% thiamin, 35% B12 and 48% niacin - making it ideal meat for hypertensive patients. Also rabbitary requires comparatively low level of capital set up; requires a little space and is well-adapted to domestic rearing.

Despite the challenges of non-readily available market when the farmers are ready to sell their stock, low knowledge of rabbit genetics/production techniques and inadequate knowledge and information about advantages of eating rabbit meat; the prolific nature of rabbits coupled with its short gestation period and generation interval, makes the animal of choice for multiplication, and serve as a short way of increasing animal protein intake. Rabbit production, thus have enormous potentials in alleviating the problem of animal protein supply in developing countries.

In Nigeria, low animal protein intake has remained a major nutritional problem, especially for the low income and non-wage earners (Amaefule and Obioha, 2005; Akinola, 2009). There is therefore an urgent need to develop rabbit (Oryctolagus cuniculus) production as a cheap source of animal protein to bridge the wide gap existing between animal protein supply and consumption. Rabbit farming is a new area in animal farming and is adapted to both rural and urban centres, tropical and temperate regions of the world alike. Its meat is purely white, bristle and palatable, highly nutritious and a convenient source of high quality protein (Okorie, 1997). Rabbit meat has been found to be nutritious, low in fat and fine-grained and it provides a suitable alternative to poultry meat. Casady, (1978) reported that rabbit meat has high biological value with high protein (21%), low fat (10%), low cholesterol and sodium while Damron, (2006) showed that a cooked piece of rabbit meat is high in protein (56%), low in fat (9%), low in cholesterol, sodium and calories (8%) and contain 28% phosphorus, 13% iron, 16% zinc, 14% riboflavin, 6% thiamin, 35% B12 and 48% niacin.

The domestic rabbit is as efficient as other farm animals in converting feed to meat for human consumption. It has since been identified as an economic livestock for small-scale rural farmers/dwellers, capable of producing about 47kg of meat, enough to solely meet the animal protein requirements of a medium size family (Abdulmalik, 1994; Hassan and Owolabi, 1996). Rabbits can be kept in the backyard in small unit of 2-4 does (females) and a buck (male) to supply the family with additional source of animal protein (Komolafe, 1990). Rabbit has a monogastric digestive system with functional caecum. Ensminger (1991) observed that the act of caecotrophy in rabbit aids in the absorption of some of the essential amino acids and vitamins. Caecotrophy also provides protein from the bacterial activity in the caecum. Varieties of feedstuffs have been used successfully in feeding rabbits. Traditionally rabbit is managed with forage-based diets as the principal feed sources.

Rabbit's skin also has some commercial values. They may be dressed, dyed and made into fur garment and slippers. Even though most domestic rabbits are raised for meat production while some are for Laboratory and biological purposes (Loosh, 1997). Bolaji (2005) reported that rabbit manure is high in Nitrogen and phosphorus and useful in improving soil fertility. The prolific nature of rabbits coupled with its short gestation period and generation interval, makes the animal of choice for multiplication and serve as a short way of increasing animal protein intake (Egbo, Doma and Lacdacks, 2001; Ironkwe, 2004). Rabbit productions thus have enormous potentials in alleviating the problem of animal protein supply in developing countries (Ezea, 2004).

Fig. 1: Semi-intensive Rabbittary

RABBITARY IN NIGERIA: THE CHALLENGES

In spite of the exceptional attributes and advantages of keeping rabbits, its production in Nigeria is still comparatively rudimentary (Onifade, Abu, Obiyan, and Abanikanda, 1999). One of the major problems of rabbit production in Nigeria is high cost of concentrates, relatively smaller weight gain during the dry season, non-readily available market when the farmers are ready to sell their stock and inadequate knowledge and information about the advantages of eating rabbit meat (Nworgu, 2006). Also, forages sometimes are the limiting factor in successful rabbit production especially conventional forages such as groundnut hay in which there is competition between the rabbit and ruminant animals. In view of this it becomes necessary to find out alternative forages for the rabbit. However, the knowledge of rabbit genetics and production techniques still lag behind when compared with other species (Sogunle, Jegede, Egbeyale and Fanimo, 2009).

CONCLUSION

Most African countries are presently in the midst of food and feed crisis. The ability of rabbits to convert forages and agro-by-products into meat more efficiently than ruminants is of great importance in the tropics where both food and feed shortages are greatest. A renewed interest in the production of rabbits by utilizing cheap and unconventional feedstuffs will result in increasing meat products in Nigeria; as rabbits have short gestation period, requires relatively smaller space, capital and labour with high fecundity. However, breeding, multiplication and production of micro-livestock with provision of adequate feeding resources and drastic re-orientation in the country's livestock production system appears to be some of the options for solving these problems.

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