OSTRICHES AS AN ALTERNATIVE PROMISING INDUSTRY TO ANIMAL AND POULTRY MEAT

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SUMMARY

"Ostrich" and camelus meaning "camel", alluding to its dry habitat. Ostrich breeding is currently one of the best investments profitable business. Struthio camelus was abundant and broadly distributed in Egypt at the end of Ninth century. Pharaohs used ostrich feathers for adornment. Its industry in Egypt is making progress, not because Egypt’s climate is ideal as far as ostriches are concerned but they thrive in dry weather and hot conditions. It controls heat loss during cold weather by covering its thighs with its wings, and during hot weather, by lifting and moving its wings to creates a gentle breeze. Egypt has numerous strengths and opportunities to develop its ostrich sector. Rising meat prices suggest that fresh ostrich meat is unaffordable to many locals. Each ostrich produces five kilos of feathers which used in the manufacture of quilts and hats. The net weight of meat represents 50 percent of live weight in ostriches, a percentage much higher than that of other farm animals such as cattle, sheep and even poultry. Female ostrich can continue this annual production for up to 40 years. Ostrich farming is a developing industry in most countries in the world, with farm profitability being largely dependent on the quality of the products, especially skins and meat. Some five-star hotels offer dishes of ostrich meat and its cholesterol-boosting characteristics. Ostrich weight from 63 to 130 Kg in female and 160 Kg in male and 45 Kg at one year of age. Their life span is up to 40 or 45 years. Tenderness of ostrich meat depends on type of muscle from which it originates. Its water-holding capacity is lower compared to pork or chicken meat, but similar to veal and beef. Ostriches live in groups between 5 to 50 birds and have better feed utilization efficiency and a larger capacity of using high fiber feeds such as pastures than poultry. They feed on a wide range of plants and food should be chopped.
They need a significant amount of gravel and sand for food triturating. Changes in diet should be introduced gradually. The excess fat resulting from feeding concentrated feeds often makes skinning difficult and contributes to flay cut damage and uneven uptake of tanning agents and inconsistency in colour of hides. Of 43 provinces, 12 were featured in 2003 - 2004 as farming ostriches: Alexandria, Al-Behera, Al-Dakahlia, Al-Wadi Al-Gadid, Aswan, Cairo, El-Sharkia, Geiza, Ismailia, Kafr-El-Sheikh, Matrouh and Nubaria. Abattoirs and tanneries specializing in ostrich handling are limited to two. Microbial control of meat products is the major concern in the preparation of high quality foods. The hygienic status of animals prior to, during and after slaughter can be critical to the finished product quality. Irradiation is known to be the best method for the control of potentially pathogenic microorganisms in meat without affecting its physical status. Ostriches are social animals, getting very quickly adapted to the environment conditions and became friendly to people. Chicken groups are characterized by hierarchies which start to be expressed at early stages of development. Breeding season starts in early spring. Ostriches reach sexual maturity between 2 and 3 years. Females tend to mature faster than males and breed in monogamous or polygamous situations. Male builds the nest that consists in a small hole in the ground. An egg is made every 1-2 days; production varies between 40 - 80 eggs per year. The chicken family groups are composed of one male, which holds a harem and the chicks. Normal pecking behaviour in chickens can become pathological due to inadequate management, often leading to cannibalism. Management strategies, such as grouping chicks for similar weights may prevent unequal food intake between the larger and the smaller ostriches, which improves welfare conditions. With the use of modern husbandry techniques and correct management, the overall production of one female ostrich during her "economic life" can reach 72 tonnes of meat, 2 000 m² of leather and 1450 kg of feathers. This production ability makes ostrich farming an extremely viable and highly economical proposition for developing countries. One possible way of attracting scientific interest and securing the proper recognition of the ostrich as an animal useful to people is to hold international symposiums. If ostrich production is to provide the meat of the future, a scientific approach is the only way forward.

**Keywords:**
Ostriches, management, farm, meat, Egypt