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EXTENSIVE SYSTEMS OF SWINE MEAT PRODUCTION BASED ON PASTURES

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Abstract: The distinction between intensive versus extensive system is based on the functional and spatial relationships between production efficiency, market orientation, cultural practices and management of resource use. The two production systems cannot co-exist because the extensive ones use low inputs, are small-scale, subsistence and mixed, vegetable and animal production. We have identified in the researched area the following extensive systems for obtaining additional swine meat for self-consumption and for the market, which ensures the well-being of animals, these being agro-pastoral and pastoral systems, mixed crop-livestock systems, organic ecological systems and systems of small farmers who produce only for self-consumption. Ensuring the minimum conditions of well-being and biosecurity of farms can contribute to obtaining good meat productions at low cost and efficient use of pasture resources.

• Introduction

The most common characterizations of swine rearing and exploitation systems for meat production distinguish between:

- intensive systems with a high level of inputs for their economy;
 - low-input extensive systems – noting that data on intensification, meat production efficiency, market orientation, cultural practices or marketing management practices – may vary considerably from one region to another depending on resources. However, the distinction between intensive and extensive production systems is based on the relationships:
 - functional between the growth and exploitation systems;
 - spaces between specialized swine farms for meat production.
- Intensive and extensive production systems cannot coexist because the last ones are systems with low inputs, of small size, of mixed subsistence production, instead the intensive ones are geographically concentrated systems, of large sizes with specialized production, swine meat and swine products and commercially oriented to market needs and trends. Some researchers have identified the following main types of rearing and exploitation systems for swine for meat production:
- agro-pastoral and pastoral systems where natural resources are limited and humans and animals adopt adaptation strategies to cope with these constraints;
 - mixed crop-livestock systems of small farmers:
 - are systems in which natural resources are managed to increase the productivity of the system;
 - are "intensive" systems in fertile areas with suitable growing conditions and relatively low population densities;
 - industrial animal husbandry systems, which are very intensive and tend not to be as linked to the local natural resource base as are agro-pastoral systems and mixed systems of smallholders.

• Material and method

In the current market conditions when the demand for swine meat is increasing and the classic intensive systems can no longer satisfy the demand due to the restrictions regarding the use of resources and the environmental risk from the farm area, an important role belongs to the extensive and alternative exploitation systems with use of local food resources. Within this scientific approach, based on the studies undertaken, consulting the opinions of other specialists in the field, solutions are sought to cover a market niche with swine meat highly demanded by consumers, obtained from pigs exploited in "natural" conditions or according to the specification of "ecological farming", presenting for the researched area some "conventional" farm models of growth and exploitation using the food resources available from the pasture.

• Results and discussions

We recommend for the researched area the implementation of other systems specific to the area of alternative meat production in Timis County, which will efficiently use local resources and from the pastures;

1. the ecological growth system;
2. outdoor growing system;
3. the 3-wall improvised shelter growing system on straw bedding;
4. the silvopastoral system in the hill area of Timis County.

These swine meat production systems to cover the needs of the market, proposed use local resources, being open-air exploitation systems on pasture and litter systems from local resources, being oriented to ensure the well-being of pigs and obtain a quality meat requested by consumers of on market. Extensive exploitation on pasture, or using local resources, allows swine access to the open air and contact with the earth and growing plants, contributing to obtaining quality meat and preserving biodiversity, through the sustainable development of the areas in the vicinity of the farms, without problems of risk of natural environmental factors.

We can say that these extensive production systems that use local resources, well managed in terms of biosecurity, ensure a good state of health for the animals and the safety of obtaining quality meat. Ensuring natural well-being gives swine farmed in these systems a good psychological state and the following freedoms through absence: anxiety, fear and stress; diseases, pain and injuries; discomfort regarding growth and exploitation; hunger and thirst; the freedom to express a natural behavior.

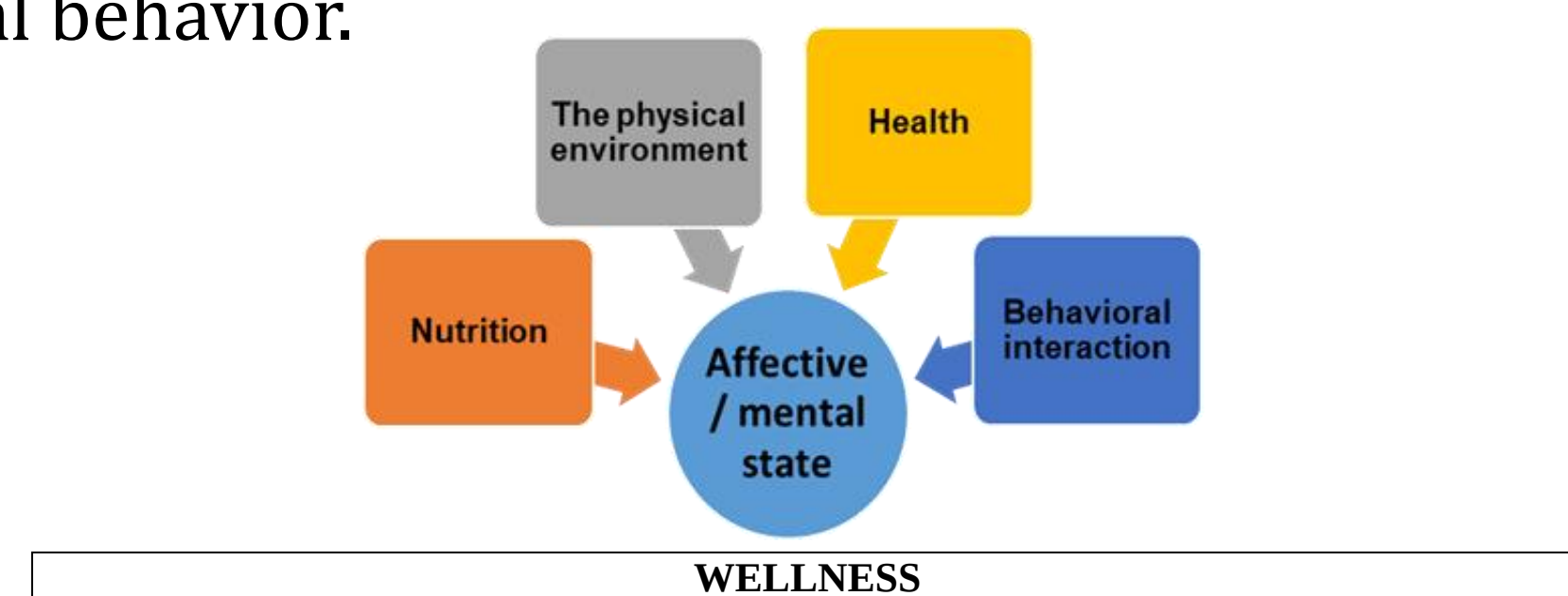


Figure 1. Elements impacting swine welfare

• Conclusions

To cover the shortage of swine meat from the market, extensive systems that use local food resources can be a viable alternative, which can satisfy the needs of consumers through the organoleptic and physicochemical qualities of the meat. Thanks to the great variety of local feed resources, meat can be produced in pastoral systems, agro-pastoral, amalgam of systems, mixed crop-livestock with resource management or their extensive use but also in combined systems to improve the efficiency of swine exploitation for meat production.