

ON FARM VETERINARY MANAGEMENT PROGRAMME (VMP) FOR THE PRODUCTION OF ENHANCED HYGIENIC QUALITY ANIMAL ORIGIN FOOD PRODUCTS: BIOSECURITY MEASURES AND ON FARM HACCP-COMPATIBLE SYSTEMS

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Introduction

The authorized farm veterinarian is responsible for the preservation of public health through the protection of the production “chain” that starts from the “stable” and ends to the consumer’s “table”. He or she minimizes all possible risks on farm, in order for enhanced hygienic quality animal origin food products (meat, milk, eggs, fishes, honey) to be produced (5,7). The key for the hygienic assurance of all on farm production procedures is the implementation of an on farm VMP under full supervision of the authorized farm veterinarian (with the coordination and collaboration of the official civil servant Veterinary Authority) (7). Critical points of the VMP are: the monitoring of all on farm health economics, the application of the correct clinical nutrition programme and the judicious use of all pharmaceutical substances in the farm (6,9). Moreover, major components of the above-mentioned programme are the appropriate “farm specific” biosecurity measures and the on farm Hazard Analysis Critical Control Points (HACCP)-compatible systems (1,3,4,10). Without the application of the VMP in all types of livestock production (porcine, ovine, bovine, avian, fish, shellfish, honey bees), it is impossible to fulfil the demands regarding the basic principles of food hygiene-safety in the E.U. (White Paper on Food Safety) for the on farm transparency and traceability of animal origin food products (that includes the food’s origin, under which hygienic conditions it was produced and how did it reach the consumer’s “table”) (7,8,9).10

Authorized farm veterinarian and VMP

The authorized farm veterinarian in order to implement the VMP has to be well educated and certified at national level by specialized veterinarians in specific veterinary medicine specialties according to the European Board for Veterinary Specialization (EBVS) (5,9). Regarding health economics in every farm the specialized veterinarian is responsible for improving all productive parameters (e.g. by declining the mortality rates), applying proper diseases surveillance schemes (e.g. with appropriate vaccination and metaphylaxis programmes) and preserving the animals’ high health status (e.g. keeping the use of antimicrobial drugs to a minimum and only for therapeutics purposes while using alternative prophylactic or control substances such as probiotics, acidifiers, natural essential oils etc.) along with the application of welfare rules. In this way there can be protection of the consumers’ health, the animals’ health and welfare, the environment and the productivity of the farm (3,4,7).

Another major issue is the control of all incoming animal feed raw materials in the farm through their certification by an agronomist for plant origin products and/or a veterinarian for animal origin products along with the

application of the appropriate clinical nutrition programme by the farm veterinarian. This programme as part of the VMP together with regular quality controls of long-term stored feeds and drinking water on farm and the obligatory application of HACCP systems in animal feed producing facilities (178/2002/E.U.) is the only way to prevent e.g. dioxins, mycotoxins and drug residues from getting into the food chain that leads to the consumers’ “table” (2,8,9).

Furthermore, special care should be given in the veterinary drugs which are used in the farm. The use of these drugs must follow the authorised veterinarian’s prescription, while the farm has to maintain all pharmaceutical substances in a specific pharmacy facility. Only officially approved products are used according to the register data sheet recommendations. It is important to maintain the labels of the veterinary drugs (including all data and prescriptions) for a period of at least 2 years in the farm’s archive (3,4,6,8).

Moreover, the farm veterinarian is responsible for issuing all veterinary hygienic certificates of incoming and outgoing animals in the farm and for the strict control of all animals’ movements. Full hygienic record is registered for all farm animals kept either for breeding or fattening purposes, until 24 months after their removal while computerized records are kept regarding performance parameters, health and treatments of every animal in the farm (5,7).

With the application of all above-mentioned measures as part of the on farm VMP it is possible to produce high health status slaughter animals, as well as improved health status animals that produce food for human consumption e.g. milk, eggs, honey etc. With the continuous preservation of the high health status of productive animals and the complete assurance of all on farm production procedures (“stable”) it is possible to fully protect the consumer’s “table” by producing animal origin food products which are absolutely safe for human consumption (6,8).

References

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Other Authorized Farm Veterinarian's responsibilities as part of the VMP:
Implementation of regular cleaning, disinfection programmes and control of rodents, insects and fomites (visitors, lorries). Continuous evaluation of these procedures e.g. by observing the incidence of common diseases in the farm and by regular sampling of concrete surfaces and measuring bacterial load (housing hygienic measurements).
Application of the essential rules for the protection of the health of farm workers and medical observation of their health. Human personnel are subjected to frequent health examinations for zoonoses such as leptospirosis, brucellosis, anthrax, and tuberculosis, and are vaccinated against influenza
Correct operation of the farm's waste management programme and follow up of sanitary and other relevant legislative arrangements for their disposal.
Existence of appropriate alarm systems and use of back up emergency systems (e.g. electrical generator) in case of mechanical, electrical or other malfunctions in the farm.
Keeping record of notification of every problem regarding the final products for human consumption and implementation of the proper regular sampling protocol at all production stages for further laboratory examinations.