The hygiene-sanitary control in the wild game meats

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Abstract

The use of game meat as a food source is currently a growing trend in our country. These products have strong and historic ties with cultural and culinary tradition, but are also appreciated for their sensory and nutritional characteristics. A major contributor to the supply of this type of product is hunting. Practiced since the dawn of time for survival, hunting has evolved into a recreational activity with substantial commercial interests. Of particular importance in this context is hunting of large ungulates. The progressive urbanization of the population has allowed for the re-establishment of bush and wooded areas that represent the ideal habitat of species such as the wild boar, whose numbers are increasing throughout the country. It is therefore clear that implementation of safety rules regarding the hunting and consumption of game meat needs to be urgently addressed. The understanding and application of rules isn’t always easy since the health law is intertwined with that of hunting, and the decision-making power left to the different regions does not contribute to a uniform application throughout the country. The aim of this study was to examine the norms that regulate the use of large wild game meat intended for human consumption and their applicability in hunting activities. From the comparison of the data reported in the literature and our field experience the rules implementation and the problems are evaluated. Operational procedures are then proposed to simplify some of the most difficult aspects and fill in the gaps highlighted.

Introduction

The law N. 157 of 11/02/1992 its subsequent amendments rule on wildlife and hunting. Article 1 Subparagraph 1 states that wildlife is a heritage to be safeguarded in the interests of the national and international community. Article 1 Subparagraph 3 states that, in addition, regions shall adopt rules relating to the management and the protection of all wildlife species. In accordance with this law, international conventions and directives must indicate the methods, procedures and technical figures of the hunting of boars in the territories. This is to manage, monitor and survey the wildlife. The technical figures included in Article 2, subparagraph 1 of the same law) apply to wildlife technicians with a technical-scientific degree, hunters licensed for collective hunting and conductors of hunting dogs. These are prescribed by the province, through special examinations, prior attendance of specific courses organized and carried out in the hunting territory in question [ambito territoriale di caccia (ATC)]. The regional council determines paths, educational activities and requirements for access to the courses, the modalities of the examination and the exam committee composition. The qualifications are valid throughout the region and the province will issue permits.

Materials and Methods

Hunting of wild animals in accordance with current legislation Regulation EC n. 852/2004, is a primary production and the hunter is a primary producer. Therefore the legally and physically responsible person is the hunter, who becomes responsible for the traceability of his product in accordance with EC Regulation N.178/2002. In EC Regulation 853/2004, Section 4, Chapter 1, points 1 to 5 it is established that: people who hunt wild game in order to market it for human consumption must have sufficient knowledge about diseases of game to correctly identify these at the scene of the hunt. It is sufficient for one person among the group of hunters to have sufficient knowledge of normal anatomical, physiological and behavioural framework of wild game, odd behaviour and pathological changes due to diseases, environmental contamination or factors which may affect human’s health after consumption; hygiene and proper handling techniques and laws concerning the conditions of animal and public health for the marketing of wild game. The trained person applies a label to each piece and attaches a statement per carcass with a serial number, stating there aren’t anomalies. This declaration must state the date, the time and the place of the slaughter. The viscer may not accompany the body except for swine, in which case the head and diaphragm must be inspected for Trichinella. In the case of anomalies being identified, the trained person who carriescout the examination must inform the competent authority. In this case all the bowels except for stomach and intestines must accompany the body. The method of transportation must be such that sanitary regulations are strictly adhered to, ensure that the carcasses are not crowded, that every carcass is accompanied by an identification number for tracking and traceability and that the refrigeration is at a maximum temperature of 7°. According to EC Regulation N. 853/2004, Subparagraph 3, Section 4, Chapter 2, the products of hunting can be used for: 1) own consumption; 2) direct sale to the final consumer or retailer; 3) local consumption, where local consumption is limited at 1 big game animal, or 500 small game animals per hunter in a year; 4) marketing.

A comparison between the current legislation and the official controls made by the veterinaries of the ASUR Marche, area Vasta 5, Ascoli Piceno-San Benedetto on meat inspected during the hunting seasons showed the following. The hunter will adhere to the relevant legislation for the protection of wildlife law N. 157 year 1992, regional law, hunting calendars and provisions referring to meat of domestic or wild swine to check for Trichinella in meat (Regulation EC 1375/2015). In this case Regulation EC 854/2004 Article 1 Point 3/A, doesn’t apply to primary production for private domestic use. The hunter has the responsibility to present only the pluck (heart, tongue, lungs, diaphragm and liver) to the veterinary service of local health for Trichinella examination Regulation EC
Once the game animals are butchered, they are stored in a processing centre, ensuring that the carcasses are not crowded, that every carcass is accompanied by the identification number for tracking and traceability, the refrigeration is at a maximum temperature of 7°C and is escorted by a Hunter’s statement that states the date, the time and the abatement MOD2. In case of bore the entire carcass is delivered without any deprivation of the parties. On arrival at the Centre, it must be examined as soon as possible by an official veterinarian in accordance with Regulation EC No 854/2004. A sample of diaphragm muscle must be collected in order to detect Trichinella before allowing distribution. The health marking is affixed only after a favourable outcome of the Trichinoscopic examination or post-mortem inspection.

Discussion

If we study the existing regulations and legislated procedures regarding the handling of hunted products, there are critical issues in some passages of the game meat chain. Our field experience during the hunting seasons (gained in conjunction with the competent authority in the territories in question) and the data in the literature on microbiological parameters of carcasses highlighted a number of critical points. No overview or control of the whole chain by the veterinarian, particularly in the case of direct consumption and carcass disposal. Here it is the hunter who vouches for the safety of the product. The hunter, (who according to the law is a trained person) generally doesn’t have specific skills necessary for adequate food inspection and control. This knowledge can fully guarantee the hygienic-sanitary quality of the product that is sold or consumed.

The first solution we propose is a reorganization of health surveillance in the whole food chain, mainly from the perspective of prevention. Initially the focus will be on the education of the hunter, thus ensuring ground level awareness of health risks from zoonotic diseases and the proper method of slaughter and handling a wild animal. This will minimize the sanitary risk and encourage sound hunting and management practices. Implementation of proper training and information can be achieved by offering training courses organized in collaboration with Territorial scopes of hunting, the regional and local health authorities, the provincial police and the State Forestry Corps, thus equating the degree of health risk information and knowledge between hunters and wildlife control officers. Additionally, authorized collection centres can be made available at hunting lodges to assist hunters with processing and sample collection. These may be sited in areas equidistant from the territory of hunting and such centres could be filled with proper equipment for gutting and handling of car-
casses. The butchering and other processes may then be performed using good hygiene practices and may be monitored and supervised by the competent authority, or a veterinarian. The constant presence of the veterinarian would ensure the implementation of proper procedures and, in case of any faults, the arrangement for non-conformity of carcasses or its parts, thereby ensuring food safety. Collection centres, additionally, may utilize specialized companies to dispose of the viscera and other waste products in a legal, appropriate manner, thus minimizing the proliferation and transmission of potential pathogens. An alternative solution may be to centralize the processing of carcasses derived from hunting in a processing centre regardless of their destination. The opening of slaughtering lines, especially dedicated and controlled by an official veterinarian, would ensure, at all levels of the food chain, quality sanitation and safety of the meats derived from hunting, allowing compliance with the relevant regulations.

Conclusions

Throughout the country there is a growing interest in the health status of consuming wildlife products. The products of hunting activities, traditionally linked to local forms of gastronomic culture, today are a desirable alternative to traditionally farmed meat. Although in some cases venatory products were subjected to medical tests that have revealed the presence of the causative agents of diseases transmissible to humans and pets, it is not of such a serious nature to cause alarm. The microbiological quality of the meat, derived from wildlife hunting, is highly dependent on operating procedures put in place by the hunters. Numerous problems were reported at this level due to unsuitable handling procedures of carcasses, during trading, evisceration and skinning. Additional source of contamination is also represented by incorrect disposal of waste products of animal origin. With this background, the weak link in the chain of food safety 178/2002. In: Official Journal L 31/1, 1/02/2002.

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