South African revised import requirements for uncooked pork and pork products from countries not free of Porcine Reproductive and Respiratory Syndrome (PRRS) May 2012

Purpose

To inform importers, trade partners and interested parties of the new measures to be introduced by South Africa for the import of uncooked pork and pork products from countries that are not free from PRRS.

Introduction

South Africa was historically free of PRRSv until its first introduction in June 2004 followed by further outbreaks in October 2005 and July 2007 which were eradicated by a modified stamping out policy. Since then a National Pig Survey was conducted in 2009 which confirmed that South Africa is free of PRRSv (De Klerk, 2011).

The current pork import conditions imposed by South Africa provide adequate protection against the introduction of foot and mouth disease (FMD), Aujeszky's disease (AD) and classical swine fever (CSF) but not against PRRS. South Africa can therefore not disregard the possibility that local swill, containing imported pork, caused the PRRS outbreaks and needs to safeguard against future outbreaks.

The risk of PRRS

Current scientific references indicate that PRRSv has been isolated from pig meat derived from experimentally infected and from commercially slaughtered animals. The virus is very stable when stored at temperatures of -70°C to -20°C and can remain infective for months to years.

It was found that a low proportion of meat samples taken at commercial abattoirs were PRRSv positive. When this meat was fed raw to naive pigs these pigs became infected, even in cases when virus could not be isolated but the meat could be found positive on PCR. This suggests that the infectivity of this virus is high.

It is important to consider the proportion of lymphoid tissue in fresh meat, which cannot be quantified. Visible lymph nodes can be removed but this is not necessarily done. Lymph nodes not accessible during slaughter will not be removed.

PRRSv is most stable at a pH of between 5.5 and 6.5, which corresponds to the pH values of pig carcasses after maturation. PRRSv present in frozen pig meat will be preserved.

Vaccine-like strains isolated from meat samples are also capable of causing infection after ingestion. It has been noted that vaccines do not prevent infection with field strains, but merely minimise the effects of the disease, furthermore the in-vivo passage of attenuated vaccine strains can see the mutation and reversion to virulence of the PRRS vaccine virus. Vaccine viruses present in slaughtered pigs could be a hazard to naive pigs.

There is a moderate to high likelihood that infectious PRRSv is present in oropharyngeal and tonsillar tissue at the time of slaughter and a lower likelihood of infectious PRRS virus present in the meat at the time of slaughter.

The only risk of exposure would be via raw pork since PRRSv is inactivated easily by heat, such as when cooked. When imported pork has to be trimmed, scraps of raw pork are generated. The quantities of scraps generated vary from low in households to moderate in restaurants, retail outlets, processors and manufacturers.

The feeding of swill in certain sectors of pig owners cannot be prevented and it is accepted worldwide that legislation regarding the feeding of swill to pigs is difficult to enforce. There is a high likelihood that scraps of pork will be ingested by semi-commercial and free-ranging pigs in South Africa.

Mitigation measures

In order to mitigate the risk, South Africa intends to restrict the importation of fresh and frozen raw pork to either: 1) originate from countries which are free of PRRS, 2) to be cuts which are deemed to be safe by the South African Director Animal Health or 3) for the product to be processed further upon arrival in South Africa at establishments approved for this purpose by the South African Director Animal Health.

A list of pork products, which are regarded as lower risk products, which will be exempted from processing post-arrival and will be accepted into South Africa from countries not free from PRRS is limited to:

- 1. Pork or pork products from PRRS free countries
- 2. Pork from countries not free of PRRS but which has been processed (cooked or fermented) sufficiently prior to export to inactivate the PRRS virus
- 3. Bone in or deboned meat free of lymph nodes and excessive connective tissue (must be certified as such)
- 4. The following offal: heart, liver (recognizable as hearts and liver)
- 5. Consumer ready cuts (as individually agreed upon with trade partners)
- 6. Skins
- 7. Subcutaneous fat
- 8. Trotters or feet excluding the carpal and tarsal joint
- 9. Tails
- 10. Ears, excluding lymph nodes

Any products that are not listed above must be processed post arrival at an establishment approved for this purpose; this list includes, but is not limited to:

- 1. Whole carcasses
- Half carcasses
- 3. Quarter carcasses
- 4. Whole heads and head meat
- 5. Trimmings
- 6. Offal (excluding heart and liver)
- 7. Mechanically recovered meat
- 8. Visceral fat

Conclusion

Available literature concurs that international agreements demand that safeguard measures should be proportionate to the risk involved. However, available data on the probability of transmission of PRRSv to naive pigs via fresh meat is not sufficiently consolidated and evaluated to draw a clear picture of the risk, which makes any judgement of safeguard measures virtually impossible.

This leads to South Africa finding the risk of PRRSv in chilled and frozen meat to be non-negligible and will take necessary steps to protect animal health in South Africa, until further scientific information to the contrary is forthcoming.