

Australian Pork Limited's Supplementary Submission  
to The Food Standards Amendment (Truth in  
Labelling Laws) Bill 2009 Inquiry:

**A Response to the Humane Society  
Submission (submission number 12)**

AUSTRALIAN PORK LIMITED



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## **1. Introduction**

Australian Pork Limited would like to thank the Senate Economics Committee for the opportunity to make a supplementary submission to the Senate's Inquiry into the Food Standards Amendment (Truth In Labelling Laws) Bill 2009.

APL has elected to make this submission in response to the Humane Society's (HS) submission (Submission 12) which directly targets the pork industry. Submission 12 has provided incorrect information about the safety of Australian Pork to the Public. As the peak National Body representing pork producers, we consider it important that the public is provided with the correct information from an informed source (APL).

APL would like to comment that submission 12 raises many points that are beyond the scope of The Inquiry, citing questionable evidence to validate their views. While the Humane Society's comments about animal welfare and the environment are largely incorrect and potentially damaging, APL was most offended by the points made in relation to the safety of our products. The Australian pork industry prides itself on a high standard of food safety and a clean, green reputation, which is the key to our export markets.

APL will take this opportunity to provide the committee and the public with the correct information on food safety and veterinary chemical use in Australian pork production. Our position in terms of The Food Standards Amendment (Truth in Labelling Laws) Bill 2009 remains unchanged and can be found in our first submission (number 14).

## **2. Food safety regulation in the Australian pork supply chain**

It is a reality that modern agriculture utilises a range of chemicals. Chemical use is not limited to intensive animal production systems, nor is it limited to animal production. In pig production, veterinary chemicals are mainly used to treat or prevent illness. Fortunately there are robust systems in place to regulate chemical use and prevent chemical residues from entering the food chain at all levels of the production and processing of pork. Given that maintaining and growing export markets is a priority for Australian agriculture, it is imperative that our food safety and Quality Assurance (QA) systems are world class.

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is the Australian government authority responsible for the assessment and registration of pesticides and veterinary medicines and for their regulation up to and including the point of retail sale. Their role is to independently evaluate the safety and performance of chemical products intended for sale, making sure that the health and safety of people, animals and the environment are protected. Only products that meet these high standards are allowed to be supplied for use. The APVMA will not register products if their use is likely to jeopardise trade or they don't work. The APVMA constantly monitors the market for compliance.

The Australian pork industry has a strong proactive history of risk assessment and analysis to ensure product safety and quality. APL administers and reviews the Australian Pork Industry Quality Assurance Program (APIQ) which covers food safety, biosecurity and animal welfare. We also administer the pigpass National Vendor Declaration (NVD) system which requires all pigs transported in Australia to be accompanied by an NVD form declaring whether the pigs have been exposed to any chemicals and whether they are still

within a Withholding Period (WHP)<sup>1</sup> or Export Slaughter Interval (ESI)<sup>2</sup> following exposure to chemicals. This system also requires all pigs to be identified so that they may be linked back to a property of origin in the event that a problem (disease outbreak or contamination) arises.

The PigPass National Vendor Declaration (NVD) includes key questions relating to farm practices, supported by an appropriate farm records system. The use of the PigPass NVD linked to a certified and audited on farm QA program (like APIQ) meets the requirements of State Food Authorities and AQIS for the hygienic production and transport of meat and meat products for human consumption (Refer to Australian Standard AS4696 – 2007). Supply chain members recognise the Australian Pork Industry Quality (APIQ) Program as providing the appropriate level of food safety assurance for their market needs.<sup>3</sup>

This system is backed up by the National Residue Survey (NRS) which is a random sampling program, that monitors chemical residue levels in Australian commodities and indicates corrective actions where required. Residues tested for in pork include agricultural chemicals (e.g. pesticides and antibiotics), environmental contaminants (e.g. heavy metals) and other chemicals that have trade concern (e.g. Dioxin).

### **3. Antibiotic use in the Australian pork industry**

Antibiotics are not used in the Australian Pork Industry for growth promotant purposes. Antibiotics are only used for either prophylactic use (to prevent a disease from occurring) or therapeutic use (to treat a disease once it has occurred).

Veterinarians may subscribe an antibiotic to be placed in the feed ration depending on the type of problem. Understandably, if large numbers of animals have to be treated (as can happen in farm populations) it is more effective to have a broad based method of providing medication. Going through and individually injecting each animal can be very stressful for the pigs. The pigs need a method of being provided medication in a fashion that large numbers of animals can access quickly, and feed is the perfect vehicle.

Many producers are now preferring to use "water medicators" when their animals are sick. These are devices which are installed onto the existing water supply and allow the antibiotic to be presented to the pigs through the water supply. These are more effective because the decision to medicate can be made and implemented quickly. It allows both the producer and his vet the means to fine-tune the medication routine.

#### **3.1 Growth Promotants**

Although antibiotics are only used for prophylactic or Therapeutic use in Australian pig production there are 2 products still listed by the AVMA as growth promotants and these are Qliquindox and Ketasamycin.

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<sup>1</sup> WHP – (Withholding period) the period following treatment with a veterinary compound when pigs are unsuitable for processing for domestic consumption

<sup>2</sup> ESI – (Export Slaughter Interval) the period following treatment when pigs are unsuitable for export processing

<sup>3</sup> Industry Quality Assurance Programs [Pigpass Website]:

<http://www.pigpass.com.au/submenu.asp?action=producer&filename=approvedQAprograms.xml>

Oliquinodox is listed in 10 different feed additives but only 4 list it as a growth promotant. Olaquinodox was widely used until the ESI under PigPASS limited its use. It is still used where possible for control of ileitis and swine dysentery. Its attraction is its remoteness from human drugs, it's low cost, and its effectiveness.

Ketasamycin is listed in a single product "Trubin L-50 Growth Promotant for pigs (Bayer)" and is specified as a growth promotant. This product is rarely used in the pig industry and for prophylactic, not growth promotion reasons. It is only licensed for pigs up to 35 kg, and has a very limited spectrum of activity.

Although the above products are listed as growth promotants, they are not widely used and are used as a prophylactic medication and not as a growth promotant regardless of the APVMA classification.

### 3.2 Antibiotic resistance

Compared to many of its international trade partners, the Australian pig industry has experienced a very low incidence of zoonotic disease problems. However, recently methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* have emerged in a number of key pig producing countries.

An APL project regarding antibiotic resistance has focused on antibiotic usage in the pig industry and its influence on antimicrobial resistance in porcine pathogenic and commensal *Escherichia coli* isolates. This Australia-wide, transparent survey involved the majority of Australia's specialist pig veterinarians and was both comprehensive and confidential. It confirmed that ceftiofur<sup>4</sup> resistance is currently at negligible levels within the pig industry and that there is widespread reliance in the pig industry on drugs rated to be of low importance in the context of human health.

This project has also shown that Australian pigs do not carry plasmid-mediated *E. coli* resistance genes of public health significance. The original project plan has been extended to include a survey to ascertain the status of MRSA colonization in slaughter pigs in relation to on-farm antimicrobial usage patterns. We are confident that the outcomes of this survey will be similar to the outcomes of the *E. coli* survey.

Regardless of the outcomes of this project an industry risk assessment plan for MRSAs based on current knowledge and future needs will be developed. Preliminary data indicate that MRSA's and *Clostridium difficile* are unlikely to be an issue for the Australian Pork Industry however Australian Pork Limited has commissioned Codex based Risk Analyses to identify possible knowledge gaps to better focus ongoing research into these areas.

Moreover, the American Academy of Microbiology recently reported (October 2009) findings indicating that the reasons behind the spread of antibiotic resistance are far more complex than primarily antibiotic abuse and misuse. The report "Antibiotic Resistance: An Ecological Perspective on an Old Problem," conferred that resistance development is part of

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<sup>4</sup> Ceftiofur is an antibiotic of the cephalosporin type, licensed for veterinary use. Strains of *E. coli* resistant to ceftiofur have been reported.

the inevitability of microbial evolution. It states that responsibility is partly due to medical practice, including patient demand, industrial practices, politics, and antibiotics themselves.<sup>5</sup>

#### **4. Hormone use**

##### **4.1 Reporcin - Porcine somatotropin (pST)**

Porcine somatotropin is the only material used by some producers to enhance lean muscle deposition in finishing pigs. Porcine somatotropin (pST) is a protein naturally produced by the brain of pig and is the main factor controlling growth and metabolism. It is administered to finishing pigs when their natural levels of pST are in decline to ensure that they continue to deposit muscle tissue and reduce the amount of fat in the carcass as required by consumers.

pST (Reporcin®) is registered for use in pigs by the Australian Pesticides and Veterinary Medicines Authority and Food Standards Australia and New Zealand. It is derived from a naturally-occurring pig protein and is not a steroid hormone. It is structurally similar to the growth hormone that occurs naturally in all pigs and regulates their growth and fat development. pST is rapidly broken down in pig tissues after treatment, so there are no residues in raw pork products.

An additional safety margin comes from the fact that it is a pig-specific protein. This means that it is destroyed by cooking and would have no effect in humans even if injected, so there is no risk to consumers or piggery workers. pST is not equivalent to a Human Growth Hormone and has no activity in humans.

##### **4.2 Improvac**

Improvac™ (Pfizer Animal Health) is an anti-GnRF immunological product containing a GnRF peptide conjugate in an aqueous-based adjuvant. Vaccination of entire male pigs against naturally occurring gonadotrophin releasing factor (GnRF) provides an alternative to surgical castration for the control of boar taint.

The product works extremely well and is a great outcome for scientific research and animal welfare, but its uptake in the industry has been low, probably less than 10%. The reasons for this are varied but currently due to the levels of imports, most domestic buyers do not require the larger carcasses. Consequently, because these animals are younger and lighter, issues with boar taint have not arisen.

##### **4.3 Beta agonists (Paylean®- Ractopamine)**

Paylean® (Elanco Animal Health) is registered for use in pigs by the Australian Pesticides and Veterinary Medicines Authority (APVMA) and Food Standards Australia and New Zealand (FSANZ). Ractopamine is a synthetic substance fed to pigs in the last 4 weeks before marketing to increase feed efficiency and muscle growth, and reduce fat deposition. This allows us to produce the low fat, lean pork products demanded by today's health-conscious consumers.

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<sup>5</sup> Vetsweb. (2009, October 22<sup>nd</sup>). News –Resistance not just caused by antibiotic misuse. Available from <http://www.vetsweb.com/news/resistance-not-just-caused-by-antibiotics-misuse-564.html>

Ractopamine does not persist in pig tissues after feeding. An additional safety margin comes from the fact that the APVMA registration requires a minimum 12 hour period between last feeding and slaughter to ensure there are no residues in the pork products sold from pigs fed this product. This additional safety margin is not considered necessary in overseas countries where ractopamine is registered. Ractopamine use is not limited to pork production and it is widely used in Canada and the US which is where most of Australia's pork imports originate from.

## 5. CONCLUSION

Australian Pork is safe to eat regardless of the production system used. It is a reality that chemicals are used in modern agricultural production systems, which is why there is a robust food safety system in place in Australia to prevent chemical residues from entering the food chain. Antibiotics are not used in the Australian Pork Industry for growth promotant purposes. Antibiotics are only used for prophylactic (for the prevention of disease) or therapeutic use (to treat a disease once it has occurred). Ractopamine and a protein called pST are used by some pork producers to improve carcass composition. These compounds are registered as safe to use in food producing animals in Australia (and in the US and Canada) and stringent safety margins are in place to prevent any residues from entering the food chain. Preliminary data indicate that MRSA's and *Clostridium difficile* are unlikely to be an issue for the Australian Pork Industry however the industry is remaining vigilant by developing a risk assessment plan, continuing to monitor antibiotic usage and researching isolation techniques. Our position in terms of the Food Standards Amendment (Truth in Labelling Laws) Bill 2009 remains unchanged and can be found in our first submission (number 14).