Quality Assured Australian Pork: A Producer Focussed Quality Assurance Program

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Background

Consumers increasingly expect the food they consume to be of high quality and safe to eat. Failure to meet consumer expectations will result in loss of market share to other competing products. In the past, the assurance of quality has been the responsibility of the processor of the manufactured foodstuff. However there is a very clear need to go back down the chain to the production sector to ensure that operational and management practices assist in the delivery of safe, wholesome, and quality food products.

While the abattoir and processing sectors of the Australian pig industry are extensively regulated, the production sector has little in the way of formal inspection or control systems designed to assure product safety and quality. Until recently, prime responsibility for product safety lay with the processor, yet the pig producer also has a major role in guaranteeing the safety and quality of pork.

In 1997, the Australian Pork Industry Quality (APIQ) program was launched. Under the program, the producer takes a more proactive role in managing and controlling those factors which impact on the safety and wholesomeness of Australian pork. The system is designed as a step-by-step process, with producers developing their own systems with guidance from trained industry facilitators. The process seeks to build technical skills into the producers so they have a good understanding of their quality system. A key issue has been to move the focus from assessing the quality attributes of pork, to the development of on-farm systems which guarantee product quality and safety in a consistent, reliable, and cost effective manner.

The Australian Pig Industry

The Australian pig industry is small by world standards, but is an efficient producer of high quality pork. Increasingly the focus is on export opportunities in the Asian market. The following table provides a snapshot of the industry.

Herds	3,337	Sows	298,815	Slaughterings/annum	4,649,800
Pigmeat production/annum	325,590,000 kg	Average slaughter weight	70.0 kg	Per capita consumption	17.4 kg
Exports/annum	8,614,990 kg	Imports/annum	9,985,119 kg		

Source: PigStats 97 (1998)

The Origin of the APIQ Program

In 1996, the Australian Government funded the introduction of quality management systems across a range of agricultural industries under the Food Quality Program. The program supported the development of a practical, grass roots approach to implementing quality assurance at six pilot pig production sites across Australia.

From this pilot scheme, the APIQ program evolved. It was established as a three stage system, building expertise and knowledge in a structured manner, ultimately taking producers to a quality system certified to an international standard such as ISO 9000 or Safe Quality Food 2000. The supposition is that to embark directly into ISO 9000 would be a significant burden on pig producers. Instead the APIQ program is based on an agreed set of industry standards. Producers sign off on these standards as Stage 1 of the program, then through Stages 2 and 3, build quality systems which demonstrate their commitment to and compliance with the standards.

The program is designed so producers secure ownership of their quality system, and can proceed at their own pace. The decision to advance to Stage 3 is based entirely upon the demands of the marketplace and the intent of the producer. The standards are based on customer expectations about the safety and wholesomeness of pork, as well as addressing meat quality issues. Meat quality issues are a major concern for the marketplace, and have been included in the program at the request of the producers. Accordingly, the transport of pigs to the slaughterhouse is also covered by the APIQ program.

Financial support for the program has been provided by the Pig Research and Development Corporation and the Australian Pork Corporation. The support extends over a two year period, beyond which the program is expected to be self-sustaining. Extensive documentation complements the program, and has been made available to all Australian pig producers. Significant support has also been obtained from State government extension officers, promoting the program and assisting in skills transfer to producers.

APIQ Program Stages

(a) Stage 1

Pig producers adopt the Pork Industry Quality Standards and sign a statutory declaration to signal their commitment to Stage 1. The standards apply to the production and transport of pigs to the slaughterhouse and include:

- Physical standards: to prevent the occurrence of foreign bodies in meat.
- Chemical Standards: to prevent the occurrence of violative antibiotic residues in meat.
- Biological Standards: to reduce the contamination of meat with microorganisms or toxins produced by plants, moulds and bacteria.
- Quality Standards: to maximise pork meat quality by reducing the incidence of pale soft and exudative (PSE) and dark firm and dry (DFD) meat.

The standards are based on the results of research and development and are constantly under review. Producers are only required to take responsibility for safety and quality attributes that they retain control over. When changes to the standards are proposed, extensive industry consultation is undertaken, and all changes must be endorsed by the Pork Council of Australia at its biannual meeting. At present, the pig industry is under intense public scrutiny because of welfare issues, and it is likely that welfare practices

will be incorporated into the Standards. This reflects the importance of this issue to the production sector, and the responsiveness of the Australian industry to marketplace concerns.

Producers are encouraged to sign off on the Standards, and register with the APIQ secretariat. During the first seven months of the program, more than 280 producers have signed up to Stage 1.

(b) Stage 2

Under Stage 2, pig producers develop a HACCP plan covering the production environment. This involves the training of staff, the documentation of a formal HACCP plan, and auditing by a second party auditor. Under the program, facilitators have been trained to assist producers attain the skills necessary to complete Stage 2, and funds have been made available to assist regional groups to work collectively towards achieving Stage 2 registration.

The HACCP system is a most effective system for assuring the quality of processed foodstuffs, and under the APIQ program it has been effectively translated to the farm sector to manage pork quality and safety. Producers define hazards to product safety (and quality), identify the critical control points (CCP) for each hazard, and design on-farm management systems to eliminate or minimise the likely risk of that hazard occurring. For example, antibiotic residues exceeding maximum residue levels (MRL) are a significant hazard, which may only be addressed by on-farm practices:

HAZARD	CRITICAL CONTROL POINT
Antibiotic residue exceeding the maximum residue level in pork	• Correct administration of approved antibiotics and identification of treated pigs • Adherence to withholding period

By identifying simple, logical CCPs and implementing effective monitoring and recording systems, producers are able to manage this potential problem, and produce pork which meets residue MRLs. This involves creating medication and treatment records which identify treated pigs, the date of treatment, drug type, and amount of medication; and a system of checking all pigs for the expiry of a withholding period before dispatch to the slaughterhouse.

In progressing to Stage 2, producers need to develop and implement an approved HACCP plan. Other requirements include regular checks on compliance with the HACCP plan, and ongoing evaluation of the integrity of the HACCP Plan to ensure it continues to meet APIQ program requirements. While progress to Stage 2 is voluntary, overseas market requirements and domestic pressure is seeing this change. The major retailers in Australia are putting in place vendor quality standards, with HACCP being used as the benchmark. By the year 2000, it is expected that all producers will need to be at Stage 2 in order to supply the domestic market.

(c) Stage 3

Progressive producers, or those seeking access to international markets may wish to advance to Stage 3 and have their quality management systems audited by a third party. Such producers may implement a system meeting the requirements of the ISO 9000 series or the Safe Quality Food 2000 quality assurance system. Producers who reach this level will be entitled to use a registered APIQ program logo.

Progress with Program Uptake

The launch of the Australian Pork Industry Quality program was attended by over 500 producers at 18 forums across Australia. The program has been very well received, with over 280 herds signed to Stage 1. Producer concerns about difficulties they have in meeting specific standards, reflect the very serious commitment they make when signing off on Stage 1. The majority of the concerns have been with standards impacting on meat quality, rather than those addressing meat hygiene and public health safety. Nevertheless, the Standards will be continuously reviewed to ensure they meet marketplace concerns and are practical to implement.

The current focus is now on advancing producers to Stage 2. Groups have been established throughout regional Australia, and trained facilitators are taking these groups through the formulation and implementation of HACCP plans.

Conclusions

The Australian Pork Industry Quality Program signals the start of a new era in the Australian pig industry, indicating an unequivocal response to identified market requirements and consumer needs. It acknowledges the consumer's focus on food safety and quality, and demonstrates a clear understanding by producers of the market pressures facing pork in domestic and export markets.

The program is strongly supported by the Pork Council of Australia, and was developed by producers working in pilot sites throughout Australia. The quality standards are objective and scientifically defendable, and address the key issues of meat hygiene, chemical residues, foreign matter, and meat quality. The program complements other quality systems operating in abattoirs, processing establishments, and in retail butcher shops, and has received strong *in-principle* support from processors and retailers.

Long term viability of pig production will be underpinned by an unstinting commitment to pork safety and quality, and this can only be achieved by marketing quality assured products to discerning markets. The significant investment in the APIQ program will ultimately result in benefits across the whole industry.