

Q SAFE: MEETING THE CHALLENGE OF FOOD SAFETY

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Keywords: meat safety, meat processing, quality assurance, retail

Background

Market access and customer demand are now linked closely with food (meat) safety. Customers must be satisfied with the wholesomeness of meat, its freedom from chemical residues, and its microbiological status, otherwise product is, or could be, barred from both international and domestic markets (Wythes *et al.* 1995). Therefore, the prosperity of the meat industry depends on everyone doing it right; being seen to do it right; and demonstrating via a *paper* trail that they have done it right.

In 1994-95, Australia produced 2.75 million tonnes of beef, sheep and pig meat of which 1 million tonnes were exported, contributing A\$3.57 billion (AMLC 1995) to the Australian economy. In that year, the State of Queensland accounted for 35%, 22%, 10%, 5% and 4% of the national cattle, pig, calf, sheep and lamb slaughter, respectively. They were processed at 37 large and 97 small slaughtering establishments for the export and/or domestic markets: the latter being retailed at 1,367 outlets (butcher shops and supermarkets).

The *Meat Industry Act 1993* (the Act) provides the legislative framework for all meat processing in Queensland. It was promulgated on 1 January 1994 and is designed to move the industry from a hygiene or wholesomeness culture of externally imposed quality control (QC) to one of internally driven quality assurance (QA), with the State Government providing the customer focus on behalf of society. The Act is administered by the Queensland Livestock and Meat Authority (QLMA). Wythes and Palmer (1994) and Palmer (1994) reported on the consultation process and concept behind the legislation at the 40th ICoMST. This paper outlines the subsequent successes and problems encountered, focusing on the retail sector.

Objectives

The Act's principal objective is to ensure the wholesomeness and integrity of beef, sheep, pig, chicken, game, and pet meat, processed for both the domestic and export markets, from the slaughter of the animal until the point of retail sale or further processing (e.g. smallgoods) of the meat.

Methods

All meat processors must operate under an approved program of production which outlines the management of their procedures, facilities and personnel to ensure product wholesomeness and integrity. This can be either a hazard analysis critical control point (HACCP)-based QA program (called Q Safe), or a HACCP-based program involving full-time meat inspection - a financially viable option for the slaughtering and further processing sectors of the industry only. In August 1995, the Federal Government and the State Governments collectively determined that HACCP would be mandatory within the Australian meat processing industry by 1 January 1997. Queensland has played a leading role in this development.

Q Safe (Q for quality) commenced in Queensland in 1988 as a voluntary, HACCP-based QA program primarily for use by small country slaughter-houses which have never been subject to full-time inspection by a regulatory authority (Merrell and Rickard 1995). It is not a comprehensive QA program covering all business activities because it pertains to product wholesomeness only. Q Safe has 15 elements, all of which are aligned with ISO 9002 guidelines.

Q Safe accreditation is held by a person(s). That person's documented quality system (for all facilities, procedures and personnel) is audited by the QLMA against the mandatory, non-prescriptive and outcome focussed Conditions for Accreditation for Meat Processing. These conditions are the operational aspects of the Act and have applied since 1 January 1995. The accreditation process involves an initial desk audit leading to temporary accreditation, followed by an accreditation audit leading to open accreditation. Subsequently, at least one compliance audit, and a number of partial audits, are conducted each year. If non-conformities are found during these audits, follow-up audits are scheduled at the accreditation holder's expense.

Results

Substantial and steady progress has been made since 1 January 1995 in implementing Q Safe within the retail sector (table 1), with 26% of butcher shops and 42% of supermarkets being open accredited as at 31 March 1996. The QLMA focussed initially on the major retailers, in particular the four large supermarket chains, to achieve its goal of ensuring that as much meat as possible was retailed under Q Safe as quickly as possible. In 1994-95, supermarkets accounted for approximately 45% of meat retail sales in Queensland (AMLC 1995), a percentage which is trending upwards.

Table 1. Number of retail outlets (butcher shops and supermarkets) in Queensland and their Q Safe status as at 31 March 1996

Category	Number	Open accreditation granted	Application for open accreditation being processed	Businesses which have had follow-up audits (%)	Businesses which have had repeat follow-up audits (%)
Butcher shop	1,168	300	128	4.7 (14)*	0.7 (2)
Supermarket	199	84	11	1.2 (1)	0.0 (0)
TOTAL	1,367	384	139		

Total numbers are shown in parentheses.

Discussion

Q Safe is being readily adopted by the retail sector, particularly by two of the largest supermarket chains. More importantly, the follow-up audit data suggest that a *quality* wholesomeness culture is being encouraged with only a small percentage of businesses failing their accreditation and subsequent compliance audits. It appears that businesses are committed to Q Safe and its principles rather than just implementing the system because it has been imposed upon them legislatively. Q Safe has been readily adopted by the retail sector due to a range of factors (Merrell and Rickard 1995), including:

- a desire to improve business and product performance;
- the large number of businesses changing hands (new owners must implement Q Safe within 30 days of purchasing a business);
- a proactive commitment to meet the 1 January 1997 deadline for implementation of Q Safe;
- the opportunity to diversify product range, e.g. manufacture and supply of pre-packaged meats to other retail outlets;
- a perceived market advantage, particularly by the supermarket chains;
- a desire to benefit from a reduction in annual accreditation fees (open accreditation attracts a 30% discount);
- an ability to tender for Queensland Government contracts which require suppliers to have QA systems; and
- recognition that Q Safe may offer a useful defence in any possible food (meat) safety related litigation.

There is still considerable work to be done before Q Safe is fully implemented with a number of difficulties to be overcome, including:

- fear of the unknown in changing from the traditional to something new;
- the legislative imposition of QA rather than it having been customer driven;
- poor internal communication within some industry organisations closely involved with the implementation of Q Safe, largely overcome with wider consultation;
- poor numeracy and literacy skills within the meat processing industry generally, being addressed by a national training program;
- perceived excessive use of complex language by regulators and consultants in communicating the principles of HACCP-based QA;
- inability of the private sector to provide industry with adequate assistance to develop Q Safe programs, a market failure which the QLMA addressed by establishing PRIMEAT Consultancies, a unit which operates independently of the QLMA's auditing section;
- industry concern about the practicality of the 1 January 1997 deadline given the magnitude of the culture change required;
- Q Safe being blamed for the closure of retail outlets when often there are other mitigating factors, e.g. competition with and between supermarket chains, extended trading hours and poor outlet and product presentation;
- inconsistent auditing of Q Safe programs by QLMA personnel due to a lack of auditing experience. The QLMA has responded by increasing auditing training opportunities for its personnel, and establishing a centralised desk auditing arrangement for major supermarket chains and franchisees;
- the QLMA having to run QC and QA systems simultaneously during the transition period, with associated cost increases; and

Conclusions

The Queensland meat retail industry has made substantial progress in implementing HACCP-based QA, with some encouraging signs of a self-regulatory culture evolving in the industry. The Government, industry leaders and the QLMA recognise that if the industry is to continue to meet increasingly sophisticated consumer requirements it must progress with the implementation of Q Safe and other QA initiatives. The application of HACCP-based systems such as Q Safe in any part of the production chain will enhance meat safety, a critical attribute of a quality meat product and consequently of paramount importance to consumers.

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