# Symposium focuses on traceability and food safety

his year's Alltech Symposium was once again held in Lexington, Kentucky, USA and featured some very interesting presentations.

Mike Donohue from Agristats looked at how statistics and benchmarking help to identify the strengths and weaknesses of US broiler production.

He highlighted the impressive improvements that had occurred over the last 40 years in growth rates, feed conversion and meat yields as a result of genetic, nutrition, management and housing improvements.

His company's highly respected independent information gathering and provision of comparative data for management to use to see how their flocks are performing, now involves 95% of US processed broilers and some 90% of the turkey industry.

In 2009 its data covered some 642 million broiler breeders which averaged 161.5 eggs at 40 weeks and almost 8,000 million broilers (some 35,000 million lbs of meat).

### Significant price rise

The cost of producing hatching eggs remained remarkably static until about 2004 when it rose significantly because of rising corn and soya prices.

Over the last few years percent hatching egg production dropped from 63 to 61% and this was probably linked to increasing breast meat yield.

Hatchability dipped in 1997 (the time of leucosis J virus) but is now improved and running steadily at 84%.

This probably represents the fact that the eradication of the J virus was accompanied by an eradication of all leucoses. In recent years broiler livability has risen from 94.4% to an impressive 96.0% and this has been paralleled by a drop in condemnations from 1.2 to 0.2%.

Between 1992 and 2009 the number of days to produce a 5lb broiler has reduced from 52 to 42 days! Breast meat yield had risen from 15% in 1994 to 21% or more in 2009. Where will we be in a further 20 years time?

#### Wide ranging data

What was very interesting was month by month data over several years showed how the improvement of summer house environmental conditions (for example, with tunnel ventilation) had virtually eliminated the summer dip in broiler performance as the birds were now being kept in constant environmental conditions the whole year round.

Interestingly, the data trends saw two factors having an adverse effect

The first was a loss in some efficiencies as good stock people were lost with the implementation of US immigration laws and the second, mainly on costings, was the impact of the fact that over a very short time a third of US corn production had switched from the livestock sector to biofuel production.

All of this has contributed, to some extent, to the fact that breast meat is now a commodity and that the price of wings is steadily improving.

Other factors that are coming more strongly into play are the increase in 'natural' production, the availability of water and the cost of treating it, air quality issues and labour availability.

Mike highlighted how it is interesting to see that over a very short period the USA has moved from virtually no broiler feed containing enzymes to the situation today where over 70% of this type of feed contains enzymes.

At the present time, bottom line profitability is oscillating all over the place!

#### **Points for reflection**

Peel Holroyd from the UK highlighted some interesting facts that are worthy of reflection, including:
Most of the major companies are in private hands. The consumer must believe in our industry and worship us!
Traceability is the cornerstone of our operations and it is our defence in the case of complaint.

• The pace of change is getting faster.

Quality is repeat business.

• End product wastage in the supermarkets should be <0.3%.

• Political correctness is to the

fore.

• By 2020 the EU will be uncompetitive and unmanageable because of legislation.

• By 2020 we must fully utilise every input.

 Today 94% of every chicken is used in China, whereas the comparative figure for the UK is 55%.

• By 2020, 98.5% of production must end up as Grade A products. Professor Shane from the USA

spoke about chemical contaminants and highlighted how unexpected ingredients such as trace mineral products, in the case of heavy metals, dioxins and PCBs, and fishmeals in the case of dioxins and PCBs often presented most of the risk.

#### **Cool conditions**

Professor Trevor Smith from Canada highlighted how the cool, damp conditions in 2009 had favoured the development of mycotoxins in American crops and that ideally one should not feed substandard (contaminated) feeds.

Where this was impossible serious consideration should be given to the use of mycotoxin absorbents.

Joaquin Pelaez from Yum! Brands Inc's China Division gave an intriguing insight into KFC's Chinese success and how this was all built on traceability, food safety and brand differentiation.

This was particularly impacted by the changing regulatory environment, following the melamine and other food scares.

The Chinese media loves to report issues (although legislation has put some curbs on what media can report to avoid consumer confusion).

China is now very concerned

about food safety and Yum! give this subject priority status although interesting differences occur between Beijing and the provinces.

The strategy is to work to the highest standards and over the last decade this has served Yum! well.

For example, for the 2008 Beijing Olympics they were asked to work with the Chinese government on food safety for the Olympics.

## Traceability

At Yum! the approach is based on traceability and involves tough microbiological and chemical standards on ingredients, tight control on the performance of production processes, cold chain management and the operation of QA and HACCP systems in their restaurants.

Yum! control the whole food chain and operate a unique upstream traceability system.

However, they do accept 100% freedom from risk is impossible, so they adopt the risk and assess its implications. Then they manage the situation.

Yum! opened its own state of the art food safety laboratory in 2005 that works closely with the Shanghai FDA and all samples are tested blind.

#### Food safety

Dr Nopporn Vayuchote from the Thai agribusiness, Betagro, then reflected on his own company's approach to food safety assurance that centred around high standards on the farm, Betagro QM and their e-traceability system.

Special emphasis is placed at farm level so the resulting meat and eggs are free from chemical and antibiotic residues, antagonists and growth hormones.

Betagro were the first company in Asia to get a farm ISO certified and the Betagro QM operates at standards above international food standards and places a heavy emphasis on unannounced audit visits by the company's own auditing teams.