

## Let's do lunch...

**MAF Food has made a strong commitment to consultation with consumers on food safety issues. But putting that commitment to work isn't as simple as it sounds.**

Everyone is a food consumer, but who is best able to represent the whole population when it comes to food safety? Will they represent all points of view? What is the best way of gathering consumers' views and communicating them to regulators such as MAF Food and the Ministry of Health?

What is the best way of making information readily available to consumers? What level of detail should there be? How can we be sure consumers' views are incorporated into food safety strategies and standards?

MAF Food is hosting a Consumer Forum in Wellington on 19 September to help answer some of these questions. All known consumer representatives and interest groups have been invited.

"This is all about setting up a robust system for communicating with consumers," says MAF Food Group Director, Andrew McKenzie. "We're serious about consultation. If it's to be effective, we need to be sure we're talking to the right people and using the right channels."

Andrew says the forum is just a beginning. "This marks a new direction in our decision making. We don't want to have people feeling they were excluded from a process of consultation when a new food standard is implemented."

The forum will focus on structures and procedures for communicating rather than canvassing particular food safety issues.

"It will be tempting to leap in and discuss some of today's burning issues at the forum," Andrew says, "but this gathering will be to establish some ground rules for future discussions on key issues. If we get this right, the quality of our dialogue with consumers will be that much better."

## Meaningful communication

MAF Food does far more than pay lip service to consultation with stakeholder groups such as consumers and food producers. In fact MAF Food defines "consultation" very clearly in its Strategic Focus document as:

"The process of actively seeking information and advice prior to making a decision. It is done with the aim of soliciting the views of those who might be affected and considering those views so that an informed decision can be made. Consultation should be between informed parties who have an open mind about the result."

The Strategic Focus document goes on to say that consultation is more than the sharing of information or informing about a decision already made. "The consulting parties must be genuinely prepared to change as a result of consultation."

But to ensure the quality of decision-making goes beyond the 'averaging' of all views, MAF Food concludes: "The result is not necessarily consensus or a lowest common denominator."

## Staying focused

Protecting public health and protecting our access to export markets. That, in a small nutshell, is the Government's objective for food administration, and what drives the MAF Food Assurance Authority's recently published Strategic Focus document.

The real detail, of course, lies in the 'how'. One important signal that comes through is the Government's wish for greater inclusiveness and innovation in growing the economy. From MAF Food's point of view, that requires a closer involvement with both the food industry and consumers (see sidebar at right and consumer forum article above).

The document highlights a number of challenges facing New Zealand's food industry and its regulators. These include:

- emerging pathogens

- changing technologies
- increasing complexities within the food chain
- growing scale in food trade
- changing consumer habits and choices
- consumer concerns.

At the broadest level – the move towards a risk-based approach with industry taking responsibility for implementing HACCP-based safety plans – is retained. It is based on what is now simply called "The Model".

While different pieces of legislation regulate food safety, this same generic approach will be applied to all of them, and will be incorporated into future legislation.

The strategic focus document also acknowledges the need for consistency in the way different pieces of legislation are applied to food production.

## Inside

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## Quality Quote

*"Breakfast is a notoriously difficult meal to serve with a flourish"*

Clement Freud

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# Antibiotic resistance: injecting some perspective

Concerns about antibiotic resistance have joined the lineup of food safety issues that now regularly make the headlines.

The perception is that the routine use of veterinary antibiotics in livestock could be contributing to the growing resistance of some bacteria to antibiotics used in human medicine. While this link hasn't been proven, it is at least theoretically possible. There are two ways it could happen.

First, bacteria in animals that have developed resistance to veterinary antibiotics could transfer to humans, where they could prove more difficult to treat. (This is more likely to happen with zoonotic bacteria such as Salmonella, which inhabit both animals and people.)

Secondly, there is a more indirect route. The resistance gene that develops in bacteria that don't cause disease (eg, normal gut flora) could possibly transfer to disease-causing (pathogenic) bacteria in people. This mechanism is much more theoretical and subject to debate.

The solution seems deceptively simple: If feeding antibiotics to animals could cause human health problems, then why not stop doing it – after all, we'd been farming animals for thousands of years by the time antibiotics were developed.

Alas, nothing's that simple. It is a complex issue that requires a careful approach.

In fact a knee-jerk reaction through blanket bans on antibiotic use in food animals could cause more problems than it solves, according to Debbie Morris, director of MAF Food's Agricultural Compounds and Veterinary Medicines Group.

"We could simply ban all antibiotic use in animals, or we can monitor them and ensure they are used with discretion and in concert with changes to farm management practices," Debbie says.

"An outright ban could cause serious animal welfare problems if infections were left untreated. This would be especially so in the pig and poultry industries, where diseases such as necrotic enteritis, swine dysentery and coccidiosis could cause havoc."

This has happened in some overseas countries, and antibiotic use had to increase to bring these diseases under control, before the situation stabilised.

Although the links between antibiotic use in animals and human health are still not fully understood, MAF is nonetheless treading with caution.

Two groups were established to chart a course on the issue and ensure a good balance between human health and animal welfare concerns:

- a steering group, including representatives from the Consumers' Institute, producer associations, veterinarians, the veterinary medicines industry, MAF, ESR, ERMA and the Ministry of Health
- an expert panel assigned the job of reviewing animal health antibiotics and their potential for causing antibiotic resistant strains of human bacterial pathogens.

The report of the expert panel to the Animal Remedies Board recommends a case by case approach, with a system of surveillance to provide more information on the development of antibiotic resistance.

"Veterinary antibiotics are not simply fed to animals to make them grow bigger. They are used to either treat existing infections or prevent infections that would otherwise make them sick. Protecting livestock from infection is very much a welfare issue."

Debbie says that in a global context, New Zealand is in a relatively safe position. "At the same time we are taking a more proactive approach to this issue than regulatory agencies in countries where antibiotics are used more intensively," she says.

Because our farming systems are largely pastoral based, antibiotic use is actually quite low, especially among sheep and cattle. The main use of antibiotics in New Zealand pastoral livestock is therapeutic, ie, to treat individual animals.

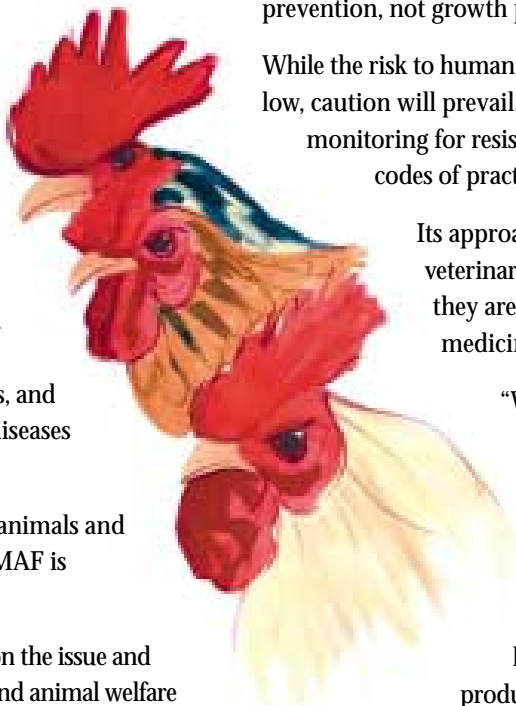
Controversy about use of antibiotics in animals tends to focus on their use either prophylactically (ie, to prevent disease), or as a growth promotant. The difference between these two practices is finely shaded.

In dairy cattle, for example, antibiotics are administered routinely to prevent bloat. While this may seem alarming, the antibiotic used is not used in human medicine, so cannot lead to resistance problems in people. In the intensive industries, animals are given antibiotics with their feed, sometimes for their entire life. It's confined to the poultry and pork industries in New Zealand, and is used for disease prevention, not growth promotion.

While the risk to human health from veterinary antibiotics appears low, caution will prevail. In addition to ongoing reviews and monitoring for resistance, the expert panel has recommended codes of practice be developed for the use of antibiotics.

Its approach to individual chemical "families" of veterinary antibiotics will depend to largely on how they are used and whether they're used in human medicine.

"We won't see radical changes," Debbie says. "Some medicines may be withdrawn, while others could have their conditions on usage changed. For example, some over-the-counter medicines may become prescription only, while others may have their use limited to therapeutic only. Veterinary products also used in human medicine are likely to be restricted."



# New Zealand in elite disease status group

New Zealand food consumers have received a strong endorsement of this country's freedom from 'mad cow disease' – which can be a risk to humans – thanks to a classification by the European Expert Scientific Committee (EESC).

The focus of the EESC's attention has been bovine spongiform encephalopathy (BSE), or mad cow disease.

Following an exhaustive risk assessment by the EESC, New Zealand has been placed in an elite group of only five countries. Along with Australia, Norway, Argentina and Paraguay, this country has been classified as having negligible risk of harbouring BSE. That's the highest status awarded to anyone by the Europeans.

MAF's National Manager, Risk Management, Stuart MacDiarmid, presented New Zealand's case to the EESC. He says it is inevitable that New Zealand would feel the ripples from the huge public concerns in the UK and Europe as new human cases of variant Creutzfeldt-Jakob (vCJD) disease emerge. (It's been shown that vCJD cases originated from products contaminated with central nervous tissue of BSE-infected cattle.)

"Public concerns about possible health risks are quite understandable, and it's appropriate that food safety measures should be put in place to keep risk material out of the human food chain," he says.

While New Zealand consumers are well insulated from the food safety risks associated with BSE, New Zealand meat producers and exporters are more directly affected.

For example, when the BSE crisis gathered strength in the UK, consumers went off beef in a big way – not just British beef, but all beef – and that hurt New Zealand exports.



The potential consequences of New Zealand not being awarded, or maintaining its elite status are dramatic because exporters could face big costs. For example, if our sheepmeat exports were required to exclude all brain and spinal column material, that could impose a heavy cost burden on exporters and producers.

The status that has been accorded to New Zealand is excellent news for both consumers and exporters.

## The strands of New Zealand's BSE safety net

Proving zero risk is like the nirvana of reaching infinity or absolute zero – you'll never get all the way, but you can get awfully close. MAF has developed its successful case for New Zealand's very favourable BSE disease status based not on a single "knockout" piece of evidence but a complex matrix of technical data going back decades. Put together, these strands of evidence made a powerful 'rope'.

Underpinning our case included the following points:

- There have only been two incidents of scrapie (a transmissible spongiform encephalopathy in sheep) detected in New Zealand. In each case they were limited to quarantined imported sheep and the disease was eradicated by slaughter and disposal of all in-contact animals.
- BSE has never been recorded or reported in New Zealand, despite intensive monitoring and surveillance.
- Importation of live animals, embryos and semen is closely controlled to exclude animals from risk areas.
- A ruminant to ruminant feed ban has been put in place. (This is how BSE was thought to have infected British cattle.)
- Meat and bone meal has never been imported from risk areas.
- Since 1990 New Zealand has had an active monitoring programme for BSE.
- As part of this programme, brains of cattle showing signs of nervous disorders pre-slaughter are examined for signs of BSE.

## Regional food safety conference attracts big audience

Some of the sharpest minds on food safety initiatives and trends shared their insights at a regional conference in Auckland last month. The event was virtually standing room only, with 280 attending from Government and industry.

Hosted jointly by the New Zealand and United States Governments, the three-day conference focused on food safety initiatives influencing public health and trade.

Speakers gave practical advice and guidance on food safety issues for those interested in exporting to the United States market, while also highlighting issues for exporters to Australia, Europe, Asia and the Middle East.

The New Zealand input was co-ordinated through MAF Food and the Ministry of Health, and focused on domestic food

safety initiatives. These include the regulatory environment and the HACCP approach.

Conference participants heard first hand advice from key United States officials on market access issues. For those wanting to keep up to date with New Zealand's fast-changing food regulatory environment, MAF Food and industry people explained the changes.

A major theme in these discussions was the move away from traditional command and control models towards more self regulation through risk-based management plans.



## Closing the door on food-borne pathogens

Two pathogens that top the 'most wanted' list of food-borne illnesses are subject to wide-ranging risk assessments that involve MAF Food.

*Salmonella* and *Campylobacter* bacteria are zoonotic organisms – in plain English, they're bugs that live happily in both animals and people. So do many other bacteria, of course, but most are benign.

*Salmonella* and *Campylobacter* infections are persistent and worrisome problems. They affect the whole food industry – literally from pasture to plate – because there are points right along this pathway where these bacteria can bloom from a harmless background presence into serious threats to human health.

Because it is an industry-wide problem, an integrated approach is needed, explains MAF Food's Director (Programme Development), Steve Hathaway.

"Meat is a biological material and there will always be a certain level of bacteria present," he says. "Our aim is to keep these levels below the point where they can constitute a risk to human health, and below the thresholds for rejection of export shipments, either in New Zealand or at port-of-entry to foreign markets."

The quantitative risk assessment for *Salmonella* is being driven by a steering group chaired by Meat New Zealand. The Programme Development Group in MAF Food initiated the project, and many stakeholders are now aboard. These include field veterinarians, farmers, university researchers, meat processors and the Ministry of Health.

The flare-up of *Salmonella* Brandenburg in South Island sheep flocks during the past four years is another spur to the research. While mainly an animal health problem to this point (it causes ewe deaths and abortions in late pregnancy), there have also been human cases.

These have been picked up mainly by people on-farm working with affected stock, not through the food chain. "However, we need to carry out a quantitative risk assessment to determine if there are any

hidden food-borne risks to domestic consumers associated with *Salmonella* Brandenburg, and also to determine if there is any penetration into the export food chain."

A multidisciplinary working group met recently to piece together the epidemiological picture at the farm level and map the possible pathway of *Salmonella* through the food chain to the consumer. Now the serious quantitative task of risk analysis can begin. By investigating risks in this way, controls can be modelled for implementation at any point in the food chain. Further, the most cost-effective and practical controls can be identified.

A similar risk assessment process is being carried out for *Campylobacter*, led by the Ministry of Health and including Massey University, Otago Medical School, ESR, MAF Food, food producers and food processors.

New Zealand has a very high reported rate of human cases, and the most important food vehicle contributing to this high rate has not yet been identified.

A recent outbreak in Hastings was traced to water from a contaminated aquifer. In this case, the source may have been animal material. Steve says epidemiological data such as this will help build a risk assessment model and give decision-makers the information they need to appropriately protect public health.

"The co-ordinated involvement of all stakeholders in food safety issues such as these, and careful establishment of their individual risk management goals, is a new approach in New Zealand.

"Research to fill data gaps can be strategically assessed and funded, and risk models provide the best vehicle to identify optimal control points throughout the farm-to-plate food chain. This approach has been endorsed by MAF Food and Ministry of Health Joint Food Harmonisation Project, and will be increasingly common in the future," he says.

### Staying focused *continued from front page*

There's a strong commitment to stay focused on trends in the international trading environment. While New Zealand has led the way in negotiating bilateral and multilateral market access agreements, the stakes are high.

The strategic focus document provides for MAF to keep up the momentum of change during the next 10 years through further reduction in trade barriers – both economic and technical.



▲ "The Model"

To access MAF Food's Strategic Focus document in full, visit the web site: [www.maf.govt.nz/Food/information/strategic-focus](http://www.maf.govt.nz/Food/information/strategic-focus)

### ABOUT FOOD FOCUS

MAF Food Focus is issued four times a year by the MAF Food Assurance Authority. It provides an overview of issues impacting on the regulatory environment for the food industries. People requiring specific information are invited to contact the Authority. Food Focus welcomes feedback and suggestions for future editions.

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