

FOOD focus

Issue 13 • December 2000

WELCOME to this final edition of Food Focus for 2000. As we wind up the first year of the new millennium, details are still being finalised for the development of an integrated food safety regulatory agency that will incorporate both exported and locally consumed products. We'll keep you posted!

In this issue we are focusing on the tremendous contribution made by New Zealanders to international efforts to enhance food safety and reduce unjustifiable barriers to trade in food products. Officials from MAF have been working in a wide range of international organisations, lending their expertise and ensuring New Zealand's interests are well served. Many of these people are regarded as leaders in their fields on the world stage. With so much at stake, this country is showing the way.

We also look at the systems used in New Zealand to protect consumers from chemical hazards in the food chain, and in keeping with this theme, we meet the Director of the Agricultural Compounds and Veterinary Medicines Group within MAF Food.

We bring you up to date on the implementation of the Animal Products Act, and explain the introduction of risk management programmes as a means of managing risks in food production. We report on MAF Food's support for a campaign to encourage safe food handling in the home, and we salute the winners of the MAF Food-sponsored Food Assurance Award.

There's plenty more besides. I hope you find this edition of Food Focus useful and informative – as always, your feedback is most welcome. And finally, I'd like to wish all readers a happy and safe Christmas and New Year.

Andrew McKenzie
Group Director
MAF Food Assurance Authority

New Zealand no bit player on the world trade stage

Globalisation has become the buzzword of the 2000s, but New Zealanders have been embracing the idea for decades. We've always been great travellers and traders, but international conditions have changed dramatically in the past 30 or so years, and we have been in the thick of the action.

In the 1970s our privileged access to northern hemisphere markets started to disappear, and in the 1980s we removed special protection from our tradeables sector by dismantling subsidies and trade barriers.

We have been enthusiastic supporters of trade liberalisation, as our membership of the "Cairns Group" – a ginger group of agricultural trading nations that helped get agriculture on the international negotiating table – bears witness! Despite recent doubts by some about possible downsides to freer trading conditions (especially since Seattle), there are big opportunities for New Zealand in the liberalised trade agenda.

As a particularly efficient producer of agricultural products we have much to gain. Today, New Zealand is a committed supporter of the World Trade Organisation (WTO) and its drive to remove

unnecessary and unjustified barriers to trade. Our representations over US lamb access show just how effective this forum can be for addressing trade issues.

MAF Food works closely with our colleagues in MAF ►

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Quality Quote

"In my experience, clever food is not appreciated at Christmas. It makes the little ones cry and the old ones nervous."

Oliver Wendell Holmes, Sr.

► Policy where people like Alan Kerr and his team regularly travel the world as part of the New Zealand Government's efforts to build on the breakthrough that came with the 'Uruguay Round'. This agreement, in the forum of the WTO's predecessor, GATT, was implemented in 1995 and is due for review next year.

Alan says it would be unrealistic to have expected all barriers to New Zealand agricultural exports to have melted away overnight. One quality that he's learned to value in his years of globe-trotting is patience.

Barriers wound back

"Things have started to turn around," he says. "The Uruguay Round has stopped the trend towards more trade barriers and now we're starting to see the many barriers wound back. For example the export subsidy disciplines agreed as part of the Uruguay Round outcome are having positive impacts on world agriculture markets. It is also worth noting that New Zealand continues to lead the quest for free trade with our own Prime Minister recently announcing the dropping of all tariffs against imports to New Zealand from our least developed trading partners."

He says that with the progressive removal of traditional economic trade barriers, New Zealanders must be vigilant against the imposition of new non-tariff measures in the form of scientifically unjustified technical barriers to trade.

New Zealand's pioneering of a risk management approach to safety issues is gaining wide acceptance within the many international forums that are used to negotiate the nuts and bolts of freer trade.

And it's at that nuts and bolts level that New Zealand trade and

technical specialists are making a big impact in clearing the way for fairer and freer trade. Their work doesn't tend to get into the headlines, but it is essential nonetheless.

MAF Food technical specialists are deeply involved in international forums such as Codex Alimentarius Commission, and their expertise in food safety issues is central to clearing the technical barriers to freer trade.

Mutual recognition of standards

Much of this work is collaborative, helping harmonise technical standards and protocols, and avoiding unnecessary duplication of effort by negotiating mutual recognition of standards and gaining acceptance of 'equivalence'.

As well as taking part in the whole range of international bodies which influence our trade, New Zealand is actively involved in various bilateral and multilateral groupings, giving additional clout for our point of view. The quadrilateral grouping of New Zealand, Australia, Canada and the United States is one such group that has lent considerable weight to the science-based approach.

In this issue of *Food Focus* we look at the work being done by MAF Food officials in some of these forums. By ensuring that New Zealand is strongly represented, we are ensuring that our philosophies and support for a scientifically justified, risk-based approach to standards and trade rules will gain international acceptance.

The disadvantages of small size and distance from markets are gradually being balanced by our involvement in shaping our terms of trade with the rest of the world.



New Zealand to host international dairy summit

New Zealand plays a strong role in the International Dairy Federation (IDF) through both the New Zealand dairy industry and MAF. IDF is a forum for international scientific and technical expertise and it provides input to related organisations such as Codex.

While promoting the development and exchange of dairy industry know-how, the IDF also supports work on trade, food standards and food safety.

In October 2001 this country is hosting the 41 member countries for the IDF World Dairy Summit. The summit will be an ideal opportunity for New Zealanders to showcase some of their world-leading dairy technology, both on and off farm.

The programme will take in technical and trade issues and will focus on some of the 'hot' new technologies emerging in the industry, such as bioactive substances from milk.

MAF Food's key dairy official in respect of this event is Phil Fawcett, National Manager International Standards. Phil says New Zealand's hosting of this event is a result of our commitment to international groups such as the IDF, and a reflection of the high international regard for our industry and New Zealand's standards.

New Zealand's dairy industry will be showcased before an international audience.

High Profile for New Zealanders in Codex

Codex Alimentarius Commission, usually known as plain 'Codex', is one of the heavyweights of international trade rules from New Zealand's perspective.

It is a joint subsidiary of the Food and Agriculture Organisation (FAO) and World Health Organisation (WHO). It was formed with the intention of protecting consumers' health while facilitating fair trade practices.

Codex standards set safety minimums, but are designed so that they protect health while not unnecessarily restricting trade.

Risk approach campaigned for by New Zealand

The codes of practice and guidelines produced through Codex are increasingly underpinned by a risk analysis approach campaigned for by New Zealand. The Codex committees, where much of the standard development is done, focus either on food groups (eg. fish, poultry, fats and oils) or issues such as pesticide residues and food hygiene.

MAF Food is strongly committed to organisations like Codex, and despite our relatively small size, we commit big resources to participating in their work. It's necessary to ensure scientifically robust food standards and protect New Zealand's trade interests. And it pays dividends.

New Zealand hosts two key Codex committees, each of which has a big impact on our food exports. The Codex Committee on Meat

Hygiene (which completely rewrote the international standards for trade in meat and game under New Zealand chairmanship several years ago), will re-convene within the next two years.

Meat hygiene is a mainstream issue, and with the implementation of the Animal Products Act in New Zealand now well underway, Codex standards which reflect current thinking in this area will form an important backdrop to the changes the Act brings.

New Zealand has also hosted the Milk and Milk Products Committee of Codex for the past 8 years and MAF Food Programme Development Director, Steve Hathaway has chaired the recent meetings.

New Zealand hosted the Committee's fourth meeting in Wellington earlier this year, with some 150 participants from 34 countries attending. At this session, standards were finalised for unripened cheeses and edible casein products, with progress made on standards for cheese varieties, cream, dairy spreads and fermented products. The next session, also likely to be in Wellington, will be held in 2002.

Although the subjects may seem prosaic, the agreed standards are vital to New Zealand's multi-billion dollar dairy industry, which is one of the world's largest international dairy product traders. It's the minutiae of standards hammered out in forums such as these that can pave the way for new and innovative products.

Stop press! Major gain for New Zealand in Codex this month

Judging the equivalence of different food control systems in different countries using a scientific and risk based process is a very important issue to countries like New Zealand who export a large variety of foods to many markets. New Zealand has led a Codex drafting group to develop international guidelines and this draft standard has been advanced to the final development step at the December meeting of the Codex Committee on Import and Export Inspection and Certification Systems.

Rapid acceptance of the guidelines by the international food safety community is an excellent result for New Zealand.

E-Cert is starting to deliver the goods

The assurance documentation that follows food products from farm to customer is now flowing via the internet thanks to MAF Food's E-Cert project.

About 1500 users are now submitting nearly 20,000 documents a month through the 24-hour, 7-day web site which is hosted by MAF in Wellington with a mirror site in Auckland.

Project manager Jeremy Blandford says the initial focus for E-Cert has been meat and game products. Since April this year electronic certification has been necessary for eligibility to export.

"Internet technology is an excellent fit for transactions like these which are documentation-intensive and require a secure operating environment," he says.

The new Animal Products Act allows for E-Cert, and Jeremy says the European Union is also looking at legislation to cover electronic

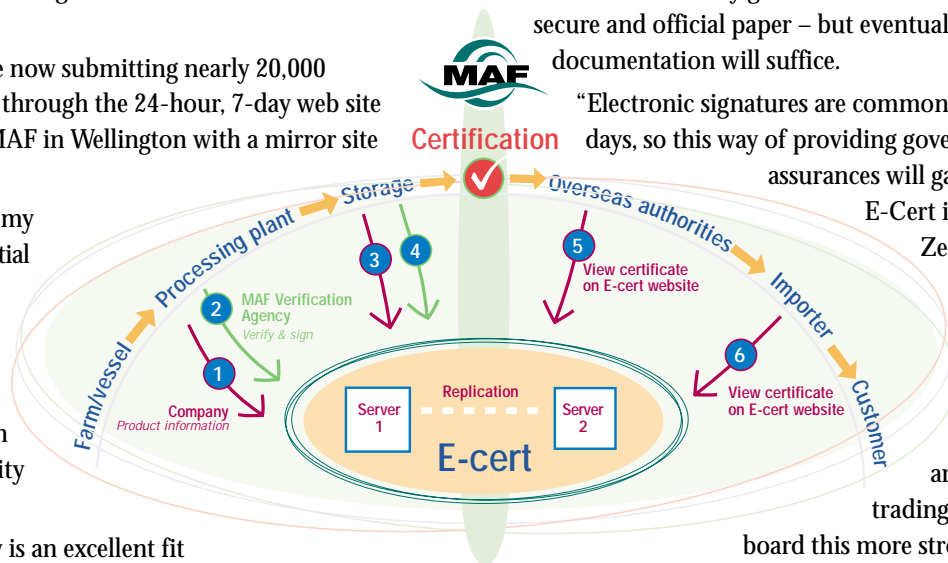
export certification. He says there's likely to be a transition period where electronically generated certification will be printed out onto secure and official paper – but eventually the electronic documentation will suffice.

"Electronic signatures are commonly used in commerce these days, so this way of providing government-to-government assurances will gain ground. At the moment E-Cert is only used within New Zealand, but we're now completing development of the electronic export certification component .

"The next step will be to set up bilateral arrangements with our trading partners as they take on

board this more streamlined and secure way of getting food safely to their markets."

The first overseas trials are expected to take place mid next year. Jeremy says that while E-Cert itself is a new application, the technology that's behind it is well proven.



Agricultural compounds and veterinary medicines update

Global zones should reduce pesticide residue testing

MAF Food pesticides expert Dave Lunn has been invited to join a steering group set up by the OECD's Pesticides Forum. The group is to develop a 'global zoning initiative' to help rationalise the amount of testing that is required in different countries for pesticide residue behaviour.

The group is to define between five and seven geographic zones where pesticides are known to decay at a similar rate. This way it is planned to develop standards where residue testing in a given zone can be extrapolated to other countries in the same zone.

The net effect of this work should be to reduce the numbers of residue trials required in New Zealand. At the same time, it will mean trials that are carried out here can be applicable to similar temperate-zone countries.

The initiative brings to pesticide residue controls the principle of 'equivalence', where trial results can be mutually acceptable between countries. It is a principle that already works well in other areas of food safety. It will also encourage greater acceptance of maximum residue levels (MRLs) set by Codex Alimentarius Commission (Codex), and allow MRLs to be applied to minor crops.

Australia and New Zealand put heads together on registration

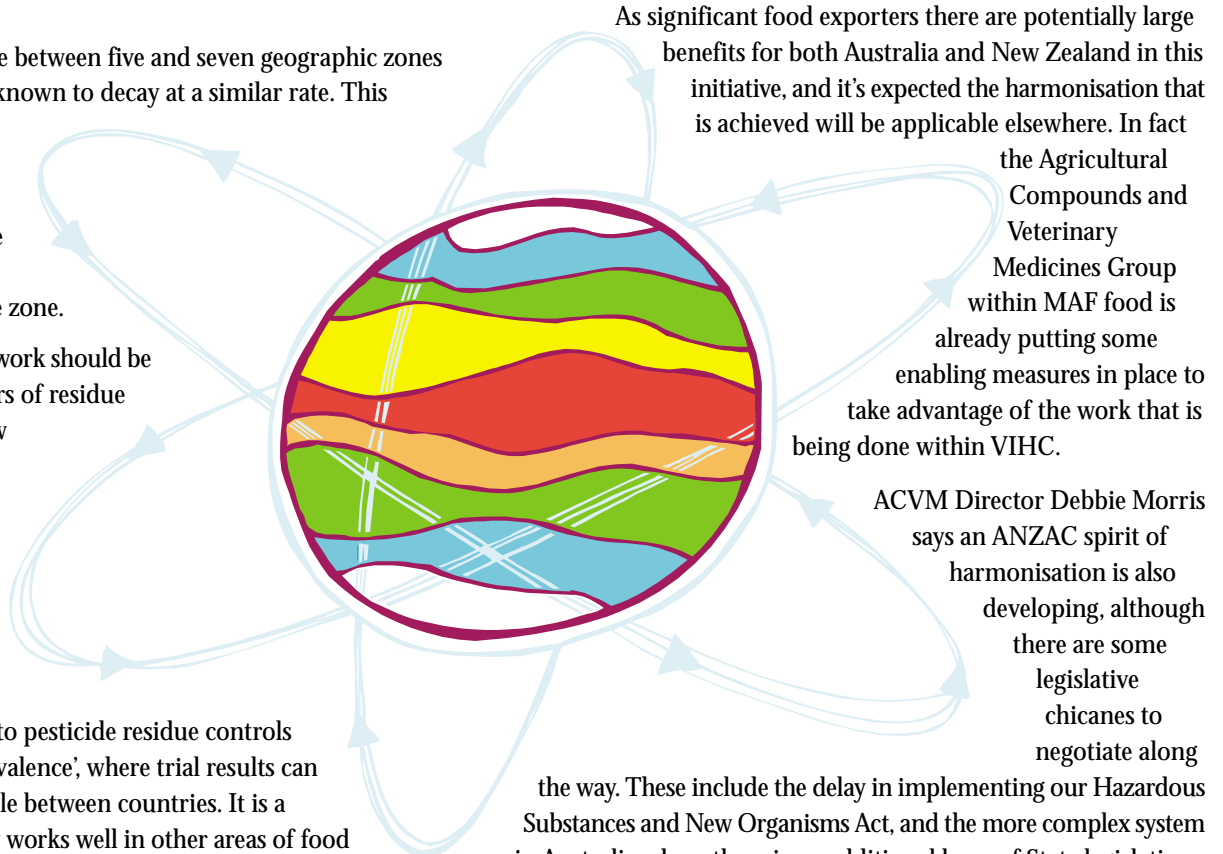
The steps required to register a veterinary product can be time consuming and expensive. These costs can prohibit registration of some products where the size of the market is considered too small to justify the expense, and New Zealand is vulnerable to this in some animal industries, potentially losing the benefits new products can bring.

An initiative to help overcome this type of problem by harmonising technical requirements for veterinary product registration includes Australia and New Zealand in an observer capacity.

The programme, Veterinary International Cooperation on Harmonisation (VICH) was set up by an OIE group about 6 years ago, and involves Japan, United States and the EU.

While the technical work will take some time, the benefits will be significant and some guidelines have already been finalised. For example, it should help cut down the time it takes for products to

pass safely through the registration process. Because duplication of testing will be reduced, the usage of animals for product testing should also decline. More uniform standards will enhance consumer safety, while the net effect should also be removal of trade barriers for both veterinary medicines and food products.



the way. These include the delay in implementing our Hazardous Substances and New Organisms Act, and the more complex system in Australia where there is an additional layer of State legislation.

However, changes to our procedures are being kept general enough to accommodate state-by-state differences across the Tasman. In other areas such as adverse event reporting there's a high level of cooperation and idea swapping going on between MAF and its Australian counterparts.

Recognising each other's MRL processes

Maximum residue limits (MRLs) for food products grown in New Zealand are set within a wide safety margin (see 'Animal remedies and pesticides registration strictly controlled' in this issue).

Because our exposure to and usage of pesticides in New Zealand tends to be reasonably low by world standards, our MRLs tend to be quite conservative. MAF's Director ACVM Debbie Morris says our MRLs tend to be set only high enough to ensure good agricultural practice, rather than setting them at maximum tolerances that may be used in other jurisdictions.

Risk levels are different for different countries, and an MRL that's considered safe in one may not be so in the other. This could be because dietary habits vary – a residue level may be considered less safe where one population eats far more of a particular treated product.

Debbie says her group is working with Australian counterparts on harmonising the processes for setting MRLs. She says that while the actual levels may remain different in different countries, it's important that the processes used for setting them have credibility. "This helps ensure transparency and can reduce barriers to trade," she says.

New Zealander working on expert animal testing panel

Contemporary animal research is underpinned by the principle of '3 Rs' – refinement, replacement and reduction. Wherever possible, research involving animal manipulation – often involving the death of the animal – is being redesigned to reduce or eliminate animal suffering.

Techniques such as tissue culture and computer modelling are among those being used to reach this goal.

MAF Food's National Manager Toxicology and Residues, John Reeve, has been invited to join an expert panel in the United States looking at alternatives to the classical LD50 test. This method of testing for toxic effects of compounds is falling from favour in the EU and other countries on animal welfare grounds.

Put crudely, the LD50 level is a level of toxin at which 50 percent of tested animals die, and it has been used as a benchmark in establishing safety limits for pesticides and other compounds for many years.

The three alternative tests being considered by the United States authorities use far fewer animals than the LD50 method, and give a result at least as accurate if not more so.

Animal remedies and pesticides registration strictly controlled

MAF's food safety efforts are focused on three groups of potential hazards: microbiological, physical and chemical. In this article we look at the system for keeping chemical residues in New Zealand food at safe levels.

While growers and farmers are generally reducing their usage of animal remedies and pesticides, the system for regulating their use remains tightly controlled.

It's a balancing act. Do away with the use of these compounds completely and it can raise animal welfare issues in the case of untreated illnesses, and trade access issues when it comes to guaranteeing that exported produce is free of unwanted pests. But if the compounds are used indiscriminately it raises equally troublesome issues – for example, food safety concerns if residues are too high, and trade access issues for the same reason.

Our regulators must steer a safe middle course based on a sound risk management and good science.

New Zealand's legislative framework for regulating agricultural compounds and veterinary medicines is in a state of transition right now (see profile on ACVM Director Debbie Morris in this issue).

One change is the setting up of an Agricultural Compounds and Veterinary Medicines Advisory Council (AVMAC). Although not a decision-making body, AVMAC is an important source of advice from producers, industry, environmental, animal welfare and consumer groups.

The principles behind the regulation of animal remedies and pesticides remain the same, however.

Getting any compound cleared for use with animals or food crops in New Zealand means running a gauntlet of stringent requirements before it is even considered for registration.

Two independent boards – the Animal Remedies and Pesticides Boards – have ultimate responsibility. John Reeve, National Manager Toxicology and Residues, is also Registrar of the Pesticides Board.



John Reeve

He says the standards we apply in New Zealand for animal remedies and pesticides are closely modelled on international standards. "We will accept the assessments of credible government authorities who are part of the same OECD framework, but the data that's submitted to support a new chemical for New Zealand use still has to go through our mill," John says.

"If necessary we will have the supplied data scrutinised independently. In some cases the conditions for use of a chemical in New Zealand are adapted to take account of New Zealand conditions."

The supporting research is required to show the likelihood of negative effects such as birth defects or compromising the immune system. This is generally done through a complex series of toxicity tests using animals; but the results must be applicable to human health.

Safety thresholds are set and large safety margins are factored in. For example, a toxic threshold level is one where there is no observable effect from a dose in the most sensitive animal used in a test (known as a 'NOEL', or no-observed-effect-level). When setting an acceptable daily intake of a pesticide, this is usually done by dividing the NOEL by at least 100.

The data must also show the potential daily intake of a chemical. ►

- ▶ This takes into account the behaviour of the chemical after it is applied (ie, its rate of decay) and also the food consumption habits of New Zealanders.

John says the diets of some cultural minorities can be quite different from 'average' consumption, but again a big safety factor is built



in to the calculations. Ultimately, the potential daily intake of a chemical residue must be lower than the acceptable daily intake (ADI) if it is to gain acceptance in New Zealand. If the level of residue is acceptable, then a maximum residue limit (MRL) is set in the New Zealand Mandatory Food Standard for agricultural compounds by the Ministry of Health after a close audit of the work done by MAF.

This is another example of the way MAF Food and the Ministry of Health work closely on food safety issues.

"The overall safety factor built in to the process is around 10,000," John says. "In other words, the safety limits we set are around one ten-thousandth of what the data tells us is a safety threshold level."

John Reeve says human health is the most important factor in deciding whether or not a compound can be used in New Zealand and how it can be applied, but there are many others. These include:

- Is the compound a prescription human medicine?
- Is it covered by the Misuse of Drugs Act?
- Could its use in animals mask the symptoms of another disease?
- Does it work as claimed?
- Is its use in line with New Zealand's food standards?
- Would its use affect our trade access?
- Could it threaten our agricultural security (eg, in the case of a live vaccine)?
- On a nationwide level, will it have an impact on productivity?

"Our system is robust, but it's also fair and transparent," John says. "While it is very thorough it is also flexible. For example, we were able to expedite the registration of products to treat varroa mite when it was discovered earlier this year – but this was done without cutting corners."

He says it is important that all stakeholders in the food production chain, from growers through to consumers, have confidence in our system for protecting our population from chemical residues.



Dairy quota certification system now live

MAF's Inward Monitoring Arrangement (IMA) project went live in late August and industry is now bedding the system in. The system is managed by the Dairy and Plants Group of MAF Food, using web-based certification.

IMA, which was taken over by MAF earlier this year, at the request of the European Commission, is a system for certifying the volumes of cheese and butter exported to the EU from New Zealand. The trade is subject to quota agreements.

IMA is underpinned by the Dairy Industry (IMA Certification) Regulations 2000, which require anyone who stores, tests or exports quota product to operate in accordance with a MAF Food-approved quota compliance programme.

The New Zealand Dairy Board, the sole exporter of quota product to the EU, sends IMA certificate requests to the MAF certification team in Auckland via the internet. The software is leading the way for the Dairy and Plants Group's move to fully electronic certification.

Project leader Carol Barnao says the software has been performing well since it went live nearly four months ago.

Reminder to farmers

The Biosecurity (Ruminant Protein) Regulations 1999 forbid the feeding of ruminant protein to ruminant animals.

Although New Zealand is free of both bovine spongiform encephalopathy (BSE) and scrapie, our credibility as a source of safe food and our access to overseas markets depends on all food producers abiding by legal requirements such as this ban.

You are asked to remember that this regulation requires that you not :

1. Provide or allow feeds containing meat and bone meal to be fed to any ruminant animal (including sheep, cattle/dairy cows, deer or goats);
2. Allow ruminant proteins such as meat and bone meal which has been applied as a fertiliser to be consumed by ruminant animals during subsequent grazing.

If you would like further details, contact Ashley Edge, MAF Biosecurity, Phone Wellington 04 474 4213.

Seminar series

Changing times for NZ food producers

If you're involved in the food industry – as a **farmer**, a **grower**, a **processor** or a **supplier** – then you'll know the world is changing. Fast.

Food safety is becoming even more important to consumers everywhere. Countries importing New Zealand food products are demanding a lot more of us. And these **changes are going to impact on your business** very soon.

To make sure our industries are prepared, MAF Food is planning to get out of Wellington and talk to industry participants throughout New Zealand early next year.

- New trading partner requirements for **dairy** products – how will they affect farmers, producers and processors?
- European and US changes for **meat** producers – what do they mean to you?
- The impact of the **Animal Products Act** on all parts of the industry
- What's happening with **food safety** in New Zealand?

Date	Venue
February 2001	
Monday 26	Invercargill
Tuesday 27	Dunedin
Wednesday 28	Timaru Christchurch
March 2001	
Thursday 1	Hokitika
Friday 2	Nelson Blenheim
Monday 5	Kerikeri
Tuesday 6	Auckland Hamilton
Wednesday 7	Tauranga
Thursday 8	Napier
Friday 9	Palmerston North Masterton
Wednesday 14	New Plymouth

More details available soon, but mark your calendars now!

Animal Products Act Part 2 heralds era of FSOs and RMPs

November 20th 2000 was a red letter day for the New Zealand food industry and for the administration of food safety legislation. It marked the implementation of Part 2 of the Animal Products Act – a section of legislation that brings risk management concepts to the forefront.

The Act gives companies in the food business the flexibility to tailor safety programmes to their own particular circumstances, within a robust framework. By taking a more active role in the design of food safety programmes, companies have the opportunity to be more innovative and competitive.

Act also heralded some new acronyms that are becoming everyday language for the food business. From November 20th, businesses can start applying to register risk management programmes (RMPs). An RMP is to be designed by the particular business to identify and eliminate or minimise the hazards and other risk factors they face. The operator is responsible for validating that the RMP meets the food safety outcomes and then the RMP must be independently evaluated.

The purpose of an RMP is to ensure that the resulting product is fit for intended purpose – it meets the New Zealand standard. Under the Act, all RMPs must meet the principles of HACCP (Hazard Analysis and Critical Control Point). Process control and supporting systems are the key means of controlling identified hazards and other risk factors within the RMP.

It is not a case of one size fits all. Risk management varies depending on the materials used, the processes applied and the products produced.

Businesses that already have MAF-recognised HACCP plans or hazard identification and analysis with no HACCP plan, and supporting systems, will not need to have these re-evaluated if they are used as a component part of an RMP. However, the RMP as a whole will be subject to evaluation. (See Reg 11 of the Animal Products (Ancillary and Transitional Provisions) Regulations 2000, for full details.)

This arrangement applies only when an RMP is first registered. When an RMP is amended, or at the completion of the initial registration period of three years, the entire RMP will require full evaluation.

MAF has produced an RMP Manual to help animal product businesses design, obtain registration and operate a RMP. It can be

found on the MAF website at www.maf.govt.nz/animalproducts/ under the heading manuals/guides.

MAF also is actively assisting those industry groups interested in developing specific codes of practice covering RMP requirements.

Where Food Safety Objectives (FSOs) fit in

The Animal Products Act paves the way for an outcome-driven approach to food safety. These product outcomes for food, or food safety objectives (FSOs) are general statements that:

- describe the expected or desired extent of control of food-borne hazards by the RMP;
- provide an effective 'target' for validation of the RMP and assessment of ongoing performance.

In some cases, the target may already be included in MAF's animal product standards or specifications, eg. pesticide residue levels or zero *Listeria monocytogenes* tolerance in cooked, ready-to-eat seafood. Where this isn't the case, the operator must formulate a target that best reflects what can be consistently achieved by the application of the RMP.

Where possible and appropriate, FSOs reflect a level of control that provides an acceptable level of consumer protection. At present, these linkages are difficult to quantify, and the poultry example we give below illustrates this well.

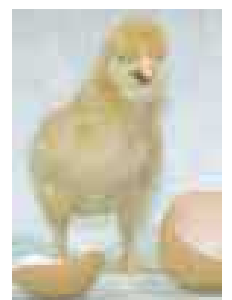
However, as risk assessment techniques develop it will become easier to make direct associations between the level of hazards in a final product and risks to human health in the consumer population. In future, the overarching 'driver' for these programmes will be government FSOs linked to Appropriate Levels of Protection for the consumer – terms that are central to the risk management framework for food safety that's being developed by MAF Food and the Ministry of Health.

Formulating food safety objectives for a particular business

Where these are not dictated by specific standards set by MAF, an operator is required to formulate FSOs for the product relative to its intended use and considering the characteristics of the process – for example, production of raw product that is to be fully cooked by the consumer before eating. In this case, the operator is expected to establish an FSO that reflects minimisation of hazards as much as is practically possible.

Application of FSOs in practice

These objectives address microbiological, chemical and physical hazards:



Raw poultry

- FSO1:** Minimisation of microbiological hazards in the product, at a specific step in the process; to levels not exceeding specified targets.
- FSO2:** Assurance that chemical residues do not exceed levels causing an adverse human health effect, as reflected by maximum residue limits, and monitored by the MAF Broiler Chemical Residue Monitoring Programme.
- FSO3:** Minimisation of the presence of bone in automatically-deboned product to levels not exceeding specified targets.†

For fresh red meat slaughter and dressing

- FSO1:** Establishment of a level of microbiological hazards that reflect minimal transfer from the gastrointestinal tract and hide to the carcass, and their redistribution, to a level not exceeding specified microbiological targets, using indicator organisms as a measure.
- FSO2:** Removal of grossly detectable abnormalities from carcasses at a level that does not cause an adverse health effect, and as measured by operator performance criteria.
- FSO3:** Removal of all known chemical residue hazards from entering the food chain by means of identification and segregation of chemical suspect lines of slaughter animals for subsequent regulatory action.



†Note the limitations of current good hygienic and good manufacturing practice. For example, there is currently insufficient information on *Salmonella* and *Campylobacter* on raw poultry to establish national food safety objectives for these pathogens. However, some individual processors may already have sufficient information on *Salmonella* to establish an FSO for this process. The implementation of the National Microbiological Database (NMD) programme for broilers is expected to provide information for establishing national microbiological targets for *Salmonella*. However, considerably more work is needed on *Campylobacter* before meaningful microbiological targets can be established.

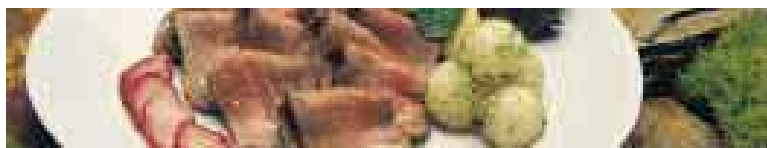


For canning

- FSO 1:** Commercial sterilisation of product by destruction of viable microorganisms of public health significance as well as those capable of reproducing under non-refrigerated conditions of storage and distribution.
- FSO 2:** Assurance that no post-processing micro contamination occurs, including by means of freedom from container integrity defects.
- FSO 3:** Assurance that the product shall not contain chemical additives, eg, sodium nitrite, at a level which may represent a hazard to human health.
- FSO 4:** Assurance that the product is free from any physical hazard that poses a risk to the consumer.

For further processing of meat

- FSO1:** Establishment of levels of microbiological hazards in the product at a specified step in the process, as measured by specific microbiological targets. This FSO is supported by the following:
- Establishment of levels of microbiological hazards in meat and non-meat ingredients at receipt;
 - Minimisation of transfer of microbiological hazards to the product and their redistribution;
 - Minimisation of growth of pathogens in the product.
- FSO2:** Prevention and/or removal of foreign objects (eg, bone pieces, metal) from the product so that specific targets are met.



Consumer groups talk turkey with government

It was a wide array of consumer groups who assembled in Wellington in September to meet with government officials and talk communication. The Food Safety Consumer Forum explored ways consumers can have a more meaningful input into food safety policy and practice.

Jointly hosted by MAF Food, and the Ministries of Consumer Affairs and Health, the forum featured some lively but constructive discussion. There was an impressive lineup of speakers bringing both New Zealand and international perspectives to food consumer issues.

They included Pamela Chan, President of Consumers International, Ned Groth of the Consumers Union of US Inc, David Russell of our own Consumers' Institute and Heather Yeatman from ANZFA.

by Hon Phillida Bunkle, Minister of Consumer Affairs. She reminded guests that it was Suffrage day, so appropriate to remember that some of the most effective food safety advocates in New Zealand history were women's groups such as the Women's Nutrition League. She urged the regulatory agencies such as MAF and the Ministry of Health to keep up with the surge in consumer advocacy.

Introducing the forum, MAF Food Director Andrew McKenzie explained to consumers how the food safety arms of MAF and the Ministry of Health were harmonising their requirements as much as possible while work was progressed to develop a single integrated food regulatory agency for New Zealand.

Ned Groth pointed out that consumers have an intuitive feel for risks. He said that while science based decisionmaking is important, value choices also have a role.

After the presentations, participants split up into workshop groups to look more closely at ways consumers could take part in food safety programmes. Some of the highlights from the consumers' workshop groups included:

What areas of food safety would most benefit from consumer input?

Representatives were keen to see good consumer education carried out and they wanted to see special consideration given to more vulnerable groups such as children. Labelling is a key issue. They also felt risks needed to be prioritised, and they wanted input on environment and food supply issues such as pesticides, growth promotants and GM foods.

How should we organise consumer input?

It was felt that consumers should be represented by a genuine cross section of the community and represent a broad range of views.

Participants said consumer representatives should be committed to their work, but not stay in the position for too long.

How do we choose representatives?

Consumers want their representatives to be well connected, well informed and influential but also to be independent.



How do we organise consumer input into decision making?

There was a strong call for Government and the food industries to help fund and support a food consumer group so that consumer views could be effectively canvassed and communicated.

How do we engage in the debate?

Consumer groups clearly wanted some quality interaction with Government. This included requirements such as plain English documents and unbiased information. They wanted Government to communicate through all available channels with enough time for feedback. The Government representatives at the forum reminded consumers that they are also keen for good, one-to-one communication. "Why not invite us to your place?" was the challenge from Keith Manch of the Ministry of Consumer Affairs.

Where to from here?

Consumers were keen to get advice on effective consultation. They would like to see a national consumer food safety forum established. Better use of existing networks was suggested and the groups want Government to 'reach out' more effectively both regionally and to under-represented groups such as Pacific Island and Maori.

Summing up at the end of a successful day's consultation, Andrew McKenzie said he understood and sympathised with most of the views expressed. "For MAF Food, consumer consultation is a big, wide new game," he said. "It isn't easy capturing people's views, but we recognise the value of getting out to regional groups and developing wider networks.

"I can assure you that from MAF Food's point of view, we're now engaged."

FoodSafe partnership targets home food safety

How long did that package of sausages stay in the back of the car after you'd picked them up at the supermarket? Was that chicken properly defrosted when you put it on the barbecue? Do you scrub chopping boards after they've been used for raw meat? Are raw and cooked foods kept separate in the home fridge?

An estimated 300,000 New Zealanders get sick each year from food-borne illnesses, and up to 40 percent can be traced back to simple food safety issues like these. It's a frightening statistic and rates are at an all-time high.

There are many causes. Modern lifestyles are a factor: we want fresh food, but only like to shop once a week; we want convenience but we also want food with fewer preservatives and additives; and we want food that's quick to prepare. It all means that extra care is needed to keep these foods safe after they've been purchased.

And the last part of the farm to plate chain – the home – is outside the direct reach of food safety regulators such as MAF and the Ministry of Health. But that's not to say nothing can be done.

The New Zealand FoodSafe Partnership is a collaboration between food industry organisations and companies, health services, the Ministry of Health, MAF and consumer groups.



Last summer the Partnership ran a nationwide education campaign through the mainstream media and other more direct channels such as brochures for consumers and is repeating it again this year. Like all good information campaigns the message is simple, focusing around the 'four Cs':

- Clean • Cook • Cover • Chill

The campaign is targeting the summer months when higher temperatures create excellent breeding conditions for food-borne bacteria – and when kiwis in summer holiday mode can get a little careless with their food handling.

It covers all the basics such as good hand-washing, careful storage of food in the refrigerator, defrosting and cooking techniques, and hints for keeping food cool when there's no fridge handy.

MAF Food Assurance Authority Director Andrew McKenzie says that MAF Food is delighted to throw its weight behind the campaign.

"It underlines the principles of good food safety practice," he says. "To protect consumers we need to do all we can to promote safety along every step of the chain. It also helps remind consumers that they're important partners in the campaign to reduce food-borne illnesses in New Zealand."

MAF expertise recognised in world animal health organisation

New Zealand's leadership in the application of risk analysis techniques is also recognised in the world's organisation for animal health, the OIE (Office International des Epizooties). Like its sister organisations, Codex and the International Plant Protection Convention, OIE works to protect health (in this case, animal health) while ensuring trade isn't unnecessarily restricted. It provides a neutral international forum in which standards can be developed to allow safe trade in animals and animal products.

The 150-member OIE was formed in 1924 to:

- inform governments of animal diseases throughout the world
- coordinate international animal disease surveillance and control efforts
- harmonise regulations for trade in animals and animal products among member countries.

The health of animals has a direct bearing on their food safety status and MAF Food and MAF Biosecurity work closely both in New Zealand and internationally. Both groups have developed internationally respected expertise and Dr Stuart MacDiarmid, MAF Biosecurity's National Manager of Risk Management has a string of achievements in the OIE. Stuart recently organised an

international conference on the application of risk analysis to aquatic animal health issues. He has taught courses on risk analysis internationally, most recently in South Africa and Indonesia, and next March will be teaching risk analysis in Hong Kong.

Stuart has also been involved in a working party on harmonisation of risk analysis techniques and is contributing to an OIE Animal Health Code chapter on BSE and the sheep disease scrapie.

Within this country he has pioneered a structured and scientific approach to decision making, when considering the risks associated with importing products into New Zealand such as salmon, genetic material of sheep and cattle and chicken meat.

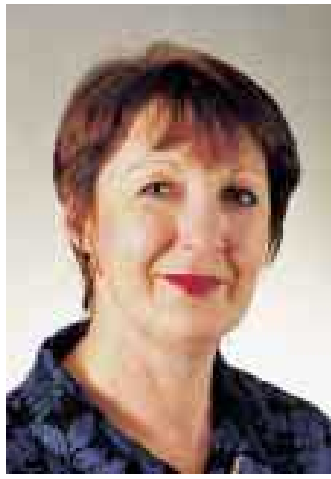
For a country like New Zealand, which depends so heavily on trade in animals and animal products it is vital that our animal health status is protected. At the same time, we must be vigilant to ensure our products are not excluded from overseas markets on unjustified grounds.



Dr Stuart MacDiarmid.

Meet our People

Debbie Morris, Director Agricultural Compounds and Veterinary Medicines (ACVM)



At first glance, you might wonder why the group responsible for registration of agricultural compounds and veterinary medicines is part of the Food Assurance Authority. But considering that managing food risks associated chemical hazards is part of the Authority's core business, it makes perfect sense.

Debbie Morris, the ACVM Group's Director, says that while the primary legislation for their activities is the (still to be implemented) Agricultural Compounds and Veterinary Medicines Act 1997, they have strong links to a whole range of other laws that involve food safety and related issues such as trade and animal welfare.

"We're very much an interface group," Debbie explains. "Much of what we do is linked to standards set in other legislation such as the Animal Products Act, Animal Welfare Act and Food Act."

As well as managing the registration of agricultural compounds and veterinary medicines, the Group monitors their importation, manufacture, sale and use.

Debbie says the Group is operating in something of a hiatus at present, as they await the implementation of the 1997 ACVM Act. The holdup has been caused partly by delays in drafting supporting regulations for the "sister" Act, the 1996 Hazardous Substances and New Organisms (HSNO) Act. The two are intended to be promulgated together.

"To help the transition we're already aligning our policies and procedures with the new ACVM Act," says Debbie. "We're working

closely with industry on this. We're also looking at changes to our current legislation – the Pesticides and Animal Remedies Acts – that can be done to help bridge the two sets of legislation."

Another option that's being suggested by the Agricultural Compounds and Veterinary Medicines Advisory Council is for the ACVM Act to go ahead independently of the HSNO Act, taking on board the public health and environmental functions on a temporary basis until HSNO is enacted.

Debbie admits that the current legislative hiatus is less than ideal, but is quick to point out that the integrity of the regulatory system is protected. "It's just a little more awkward now than it will be under the new laws, but jobs like registering a pesticide to treat Varroa-infested hives are still being done on time and as required."

Although a relative newcomer to MAF, Debbie's career has intersected with her current role at various times in the past. She joined MAF three years ago as a project change manager in the then Dairy/ACVM Group, and then became Director of the ACVM Group when the Food Assurance Authority was formed in mid 1999.

She came to MAF from Telecom where one of her roles was internal account manager, "helping bridge the cultural divide between IT and marketing – a challenging task!"

Debbie has also spent a number of years with the Dairy Board, part of this time managing a business unit developing innovative new food products like powdered cheeses and yoghurts. Prior to this she worked at the former ICI/TVL in Upper Hutt in a marketing role.

Her experience in both the food and agricultural remedies industries has given her a good understanding of the issues faced by some of the stakeholder groups who have an interest in food safety.

Outside the glass towers of Wellington's business district Debbie has been involved in netball at all levels and in many roles "for more years that I care to remember!" She's been a player, coach, umpire and administrator – at both club and regional level. Debbie is also a keen motor sports fan and an active member of the MR2 owners' club.

Gourmet salmon products take MAF Food Award

The Prime Foods' range of gourmet marinated salmon products won the prestigious Food Assurance Award category at the recent Massey University Food Awards.

Sponsored by MAF Food, the award is given for a food product that, through its production process, labelling, presentation or in some other way, contributes meaningfully to improving public confidence in New Zealand's food safety system.

Prime Foods Managing Director Henry Studholme said the products were developed to complement the company's range of smoked salmon products. Created in association with Christchurch restaurateur Michael Lee-Richards, the new products required a well-managed food safety risk management programme.

Henry says the HACCP programme was built on the earlier plans devised for their cold smoked salmon, but because no two products



are the same, it had to be adapted to take into account factors like the new food components.

"It was a very detailed process and we worked closely with MAF throughout. We're very pleased with the programme. Salmon is a very challenging product when it comes to microbiological hazards, so the company has always been finely attuned to food safety issues."

Staff are trained to run the programme, which is regularly audited by MAF. "We've always found MAF good to work with. Issues do crop up, but they're always resolved with a good commonsense approach," Henry says.

The marinated products – Gazpacho, Mahogany and Lacquered Flavours – were launched in April last year.

Established in 1994, Prime Foods processes about 150 tonnes of salmon a year. It is based in Hororata, 50km west of Christchurch.

The company exports to Australia, Japan, the United States, French Polynesia and the Middle East, and is looking to broaden its specialist products further.