

# FOOD STANDARDS NEWS



The Newsletter of Food Standards Australia New Zealand

April 2003

## Changes to the Code

On 27 February 2003, FSANZ gazetted the following amendments to the Food Standards Code:

### Irradiation of tropical fruits (A443)

The *Food Standards Code* has been changed to allow the irradiation of the tropical fruits breadfruit, carambola, custard apple, litchi, longan, mango, mangosteen, papaya and rambutan as a pest disinfection measure for critical quarantine pests such as the fruit fly. The permission is for irradiation to a maximum of 1 kilogray from machine-sourced electron beams or x-rays, employing Good Manufacturing/Irradiation Practices. Irradiated tropical fruits require mandatory labelling to give consumers an informed choice when buying these fruits.

The application of irradiation for this purpose must be in accordance with the requirements of quarantine authorities in Australia and New Zealand.

### BSE in beef and beef products (P238) (Australia only)

In July 2001, the *Food Standards Code* was amended to require bovine meat and bovine-derived food ingredients in the Australian food supply to be derived from animals free from BSE (mad cow disease). On the basis of available science at the time, FSANZ concluded that the BSE risk from milk and dairy products, gelatine, fats and tallow, collagen from bovine skins and hides, and non-beef flavourings did not justify any restrictions on these products.

After a comprehensive scientific risk assessment, the Code now also requires bulk tallow and bone-derived gelatine to be derived from cattle that are free from BSE.

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## New survey shows a safe food supply

Australia's food supply is one of the safest and cleanest in the world, according to the results of FSANZ's 20th Australian Total Diet Survey which was released in February.

Parliamentary Secretary on Health, Trish Worth, said the survey reaffirms that the food supply in Australia is safe and clean and meets Australian and international health standards. Ms Worth said the survey showed that Australia's food supply is very low in pesticide residues, contaminants and other substances such as metals, aflatoxins and antibiotic residues.

The survey is part of the monitoring process of the food supply to ensure the protection of consumer health and safety. A total of 65 commonly eaten foods were tested. These foods were representative of the Australian diet and included a range of meats, dairy products, fruit, vegetables, breads and cereals.

Samples were taken in each State and the Northern Territory over a nine-month period. Both raw and cooked foods were prepared as 'table-ready', and were analysed by the Australian Government Analytical Laboratories.

"Key results showed that the estimated dietary intake of pesticide residues and contaminants are well within acceptable health standards," Ms Worth said.

"In addition, there were no detections of either aflatoxins or ochratoxin A in nut and cereal products, the foods in which they are most likely to be found. The tests also found no antibiotic residues detected in any meat and poultry products, dairy products or eggs.

"This diet survey not only helps to reassure Australian consumers of the food they are buying, but also our overseas markets of the safety of the Australian food supply."

Results of the survey will be provided to the World Health Organisation as Australia's contribution to the Global Environmental Monitoring System that collects data on the levels of pesticide residues and contaminants in the food supply worldwide.

The 20th Australian Total Diet Survey publication and additional background information is available on FSANZ's website at [www.foodstandards.gov.au](http://www.foodstandards.gov.au). A limited number of hard copies are also available by sending an email to [info@foodstandards.gov.au](mailto:info@foodstandards.gov.au).

« Changes to the Code cont.

### Approval of processing aids (A404) (A458)

Processing aids must be assessed and approved before they can be used in the manufacture or processing of foods. The enzyme glucose oxidase from the genetically modified source *Aspergillus oryzae* has been approved for use in the baking industry. Approval has also been given for the use of lactoperoxidase and sodium (and potassium) isothiocyanate as processing aids on the surface of meat to inhibit bacteria.

Because the lactoperoxidase system contains milk proteins, their presence in meat must be identified on labels for the benefit of consumers who are allergic to milk.

The Final Assessment reports for A443, P238, A458 and A404 appear on the FSANZ website at [www.foodstandards.gov.au](http://www.foodstandards.gov.au). The Gazette Notice can also be found on the website.

## Ministerial Council establishes food regulation website

The Australia and New Zealand Food Regulation Ministerial Council (Ministerial Council) operates under the 2002 Inter-Government Agreement on Food (IGA). The Commonwealth of Australia and the Australian States and Territories signed the IGA on 3 November 2000. New Zealand's role in the food regulation system and on the Ministerial Council is set out in the Australia New Zealand Joint Food Standards Treaty.

The IGA and the Treaty charge the Ministerial Council with the responsibility for the development of domestic food regulatory policy guidelines for setting domestic food standards. All policy guidelines under development by the Ministerial Council go

through a process of stakeholder consultation. A set of Principles and Protocols for Stakeholder Consultation are currently before the Ministerial Council for endorsement.

A Food Regulation website has been established to provide public access to accurate and up-to-date information about the structural and legislative/regulatory reforms and on strategic policy matters determined by the Ministerial Council. Details of all consultations relating to policy guideline development by the Ministerial Council will be notified on this website. The website also has all policy guidelines approved by the Ministerial Council. The website address is [www.foodsecretariat.health.gov.au](http://www.foodsecretariat.health.gov.au).

## FSANZ looks at raw milk very hard cheeses

The *Food Standards Code* requires that all cheeses sold in Australia must be made from milk which has been pasteurised or had a similar heat treatment.

In December 2002, FSANZ approved an exemption to the heat treatment requirement for milk used to make very hard grating cheeses. This amendment to the Code means that the importation of raw milk very hard grating cheeses can continue and that the Code now permits the sale of these cheeses if produced domestically.

In making this approval, FSANZ considered a scientific evaluation it had commissioned from Food Science Australia, Australian and overseas epidemiological data and other information available on the public health and safety risks associated with these products.

FSANZ considered that these cheeses could be made to an equivalent level of safety as similar cheeses made from pasteurised or thermised milk, providing good hygienic and good manufacturing practices are followed.

However, due to the concerns expressed by dairy regulators and some sectors of industry about this amendment to the Code, FSANZ has undertaken to review the decision by December 2003. To help shape the review

process, a workshop was convened in Melbourne in February to enable industry, State and Territory regulators and FSANZ to share information and consider the issues of concern for regulators and industry.

The workshop provided a valuable opportunity for stakeholders to provide information from their various perspectives on the FSANZ decision.

The workshop heard from FSANZ in relation to the new Code. This included discussion on the principle of meeting public health and safety requirements while using minimum effective regulation; the facilitation of innovative approaches, the frameworks we use in our decision making processes relating to public health and safety and the impact of international obligations in standard setting matters.

A presentation by Mr Martyn Kirk, Co-ordinating Epidemiologist for the OzFoodNet food-borne illness surveillance project in Australia, reported that no outbreaks of food-borne illness in Australia or overseas have been reported from the consumption of raw milk very hard grating cheeses.

Industry also reported, from a number of perspectives. While some industry sectors

saw the amendment to the Code as a positive step towards innovation for domestic producers, others were cautious and urged that appropriate food safety systems be put in place in Australia to enable the safe domestic manufacture of these products. This was a message also echoed by the dairy regulators.

In addition, dairy regulators raised technical issues concerning cheese production processes, the scientific evaluation of raw milk very hard grating cheeses and the conclusions drawn by FSANZ. The challenge of assessing the impact and efficacy of processing variables on product safety was the subject of some discussion.

To address these issues, it was agreed that FSANZ would hold a further technical workshop to focus on technical matters related to the amendment to the Code. It is proposed that the technical workshop will be convened in early April 2003.

The second issue of significance was a discussion about the appropriate food standard setting principles for decisions relating to raw milk very hard cheeses. This issue is significant for standards setting work in relation to raw milk cheeses and FSANZ will explore these issues further in consultation with affected stakeholders.

# FSANZ's Regulatory Impact Statements

FSANZ recently signed a Protocol with the Office of Regulation Review (ORR), a Commonwealth Government agency with responsibility to promote efficient regulation in Australia. The Protocol sets out the roles and responsibilities of the ORR and FSANZ in the development and consideration of Regulatory Impact Statements.

ORR helps FSANZ staff prepare high-quality RISs by providing guidance on the regulatory assessment requirements. In particular, it provides guidance on the variety of issues

relating to cost-benefit analysis and the impact of regulatory options on the economy.

The Protocol also provides for resources to be used strategically and targeted on the more complex and high profile assessments, where a comprehensive RIS will thoroughly demonstrate the pros and cons of amending the Code.

FSANZ prepares an RIS for all of its standards.

An RIS helps regulatory managers understand the impacts (both good and bad) of the

regulatory options being considered. It sets out to define the nature of the problem being addressed by the regulation and the nature of the risks (to public health and safety, or more general societal risks and information needs).

It also lists a range of options and sets out to describe – and, as far as possible, measure – the costs and benefits of the options. This process, together with the scientific risk assessment, helps FSANZ determine the most appropriate regulatory option to address the problem.

## FSANZ conducts hui with Maori

FSANZ's Maori Reference Group ('Kahui Kounga Kai') hosted three consultation hui (meetings) in February for Maori representatives with an interest in food, nutrition and public health. The purposes of the hui were to raise awareness amongst Maori of the role of the Reference Group and the work of FSANZ and to receive feedback direct from the communities, including Maori.

The meetings provided an opportunity to outline recent developments and progress made in working and consulting with Maori. They also allowed discussion on key issues in relation to the development of food standards.

The hui were held at the Waiwhetu Marae, Lower Hutt, on 11 February, the Kirikirioa Marae, Hamilton on 12 February and the Nga Hau E Wha National Marae on 13 February. As a result of these consultation hui, FSANZ is hoping to further develop relationships and improve consultation with Maori.



Attending the hui at Nga Hau Wha National Marae, Christchurch on 13 February 2003 were (left to right), Dr Hugh Baber (FSANZ), Ann Hunt (FSANZ), Makuini McKerchar (Member of Kahui Kounga Kai), Kim Workman (Facilitator for the consultation hui), Hiki Pihema (FSANZ Board), Rongo Wirepa (Kaumatua of the Kahui Kounga Kai), Pania Hammond (Member of Kanui Kounga Kai) and Laurie Wharemate (Member of Kahui Kounga Kai).

# Public comment sought on proposed changes to Code

Food Standards Australia New Zealand (FSANZ) invites public comment on a number of possible changes to the *Food Standards Code*:

## **Intense sweeteners in jelly (P273) – Draft Assessment**

The *Food Standards Code* does not currently permit the use of cyclamates and saccharin as sweeteners in jelly. Although other intense sweeteners are permitted in the Code, almost all low joule jellies produced in Australia and New Zealand use only cyclamates and saccharin. Consumers of these products include people with type 1 or type 2 diabetes, obesity, hypertension or other conditions calling for weight loss and/or dietary sugar restriction. FSANZ proposes adding these permissions to the Code and seeks comment from jelly producers and from consumers of low joule jelly or their representatives.

## **Hexose oxidase as a processing aid (A475) – Draft Assessment**

FSANZ must assess the safety of processing aids before approving their use by the food industry. The enzyme hexose oxidase can be used in bread making and in the manufacture of cheese and tofu where it can perform a range of functions. FSANZ has concluded that the enzyme poses no public health and safety concerns and that its use has been technologically justified by the applicant. FSANZ proposes to add hexose oxidase to the Code's list of approved processing aids and seeks comments.

## **A new intense sweetener, Twinsweet™ (A452) – Draft Assessment**

A new intense sweetener, aspartame-acesulphame salt (Twinsweet™), when dissolved, breaks down into two food additives that are already permitted for use by the Code. FSANZ has conducted a pre-market risk assessment on aspartame-acesulphame salt, concluding that it raises no safety concerns and that it fulfils its

technological purpose as an intense sweetener. FSANZ welcomes comment on the potential costs and benefits to consumers, industry or government arising from an approval of this intense sweetener as a food additive.

## **Phytosterol esters in a range of foods (A433) (A434) – Initial Assessment**

In 2001, permission was given for food manufacturers to use phytosterol esters derived from vegetable oils as a novel food ingredient in edible oil spreads and margarines. The manufacturers claim that phytosterol esters reduce plasma cholesterol levels in people. Permission was not initially given for the use of phytosterol esters in a broader range of foods because of lack of information relating to their safety and efficacy. Additional data is now available. The applicants are seeking to extend the approval to a fibre-increased bread and breakfast cereal bars (A433) and to low-fat milk and low-fat yoghurt (A434). FSANZ invites comment from interested parties on a number of questions raised in the Initial Assessment reports.

## **Bacillus cereus limits in infant formula (A454) – Initial Assessment**

An infant formula manufacturer has applied to vary the microbiological limit for *Bacillus cereus* in infant formula currently specified in Standard 1.6.1 of the *Food Standards Code*. The manufacturer believes that the limit is too restrictive and cannot be complied with consistently under good manufacturing and hygiene practices. FSANZ is seeking public comment on matters relevant to the application, including the regulatory options proposed by the applicant and the costs and benefits of those regulatory options.

## **Definition of the term “wholegrain” (A464) – Initial Assessment**

The applicant considers that the definition of “wholegrain” in the Code is too limiting for food manufacturers and potentially misleading

for consumers. The applicant has proposed an alternative definition. FSANZ would like public comment on the need for a new definition of “wholegrain”, on the public understanding of the definition and on any health or cost implications to amending the definition in the Code.

## **Acidified sodium chlorite as a processing aid (A476) – Initial Assessment**

This application is to allow the use of acidified sodium chlorite to reduce the number of micro-organisms during the processing of fruit and vegetables, raw poultry, red meats and raw or cooked comminuted or formed meat products (salami-like products). Comment is invited from companies with knowledge and experience in the technologies outlined in the application and from consumers, who may benefit by having some treated food products with improved safety and a longer shelf life.

## **Lysophospholipase as a processing aid (A492) – Initial Assessment**

The applicant claims that the enzyme lysophospholipase can be used as a processing aid to improve filtration rates during the production of caloric sweeteners from hydrolysed wheat starch. *Aspergillus niger*, the source for the enzyme, has a long history of safe use in the production of food enzymes. Processing aids are required to undergo a pre-market safety assessment before approval for use in Australia and New Zealand. Submissions are invited from interested parties.

**Submissions:** Submissions should be received by FSANZ by **30 April 2003**, except for P273, which closes on **16 April 2003**.

**More information:** Initial Assessment reports for A433, A434, A454, A464, A476 and A492 and Draft Assessment reports for A452, A475 and P273 can be found on the FSANZ website at [www.foodstandards.gov.au](http://www.foodstandards.gov.au) under What's New / Documents for Public Comment.

## How the ATDS works

The 20th Australian Total Diet Survey (ATDS) estimated the dietary exposure (intake) of the Australian population to a range of pesticide residues, contaminants and other substances that are sometimes found in the food supply.

Dietary exposures were estimated for six age-gender groups: infants (9 months), toddlers (2 years), girls (12 years), boys (12 years), adult females (25-34 years), and adult males (25-34 years).

FSANZ managed the ADTS with the help of the States and the Northern Territory, who collected and organised the preparation of the food samples. The Australian Government Analytical Laboratories conducted all the analyses.

Commonly available foods examined in the ATDS were prepared as if they were going to be eaten before they were analysed. Sixty-five types of foods representative of the Australian diet were tested for pesticide residues, contaminants and other substances from foods sampled at four different times throughout the year to account for seasonal differences.

Food types included core foods, foods that might be expected to show regional variation and foods that are available nationwide and are not expected to show regional variation.

All foods were screened for pesticide residues, including chlorinated organic pesticides, organophosphorus pesticides, synthetic pyrethroids, carbamates and fungicides. Foods were also screened for metals that occur naturally in the environment: antimony, arsenic, cadmium, copper, lead, mercury, selenium, tin and zinc.

Breads, biscuits, rice, oats, processed wheat bran, breakfast cereals (including infant cereal), instant coffee, peanut butter, almonds and milk chocolate were tested for aflatoxins (B1, B2, G1 and G2) and ochratoxin A.

A range of meats, dairy products, eggs, offal meat and infant formula were tested for 'inhibitory substances' such as the antibiotic residues penicillin G, streptomycin and oxytetracycline.

## Key results from the 20th ATDS

- The estimated dietary exposure to pesticide residues and to antimony, arsenic, cadmium, lead, mercury, copper, selenium, zinc and tin were all within acceptable Australian and international health standards. Improved analytical techniques with a lower limit of reporting for antimony and mercury were instituted for this survey and as a result a more refined dietary exposure estimate for these contaminants was achieved than in the 19th survey.
- Aflatoxins (B1, B2, G1 and G2) and ochratoxin A were not found in any food tested, namely, breads, biscuits, rice, oats, processed wheat bran, breakfast cereals (including infant cereal), instant coffee, peanut butter, almonds and milk chocolate.
- A range of meats, dairy products, eggs, offal meat and infant formula were tested for 'inhibitory substances' such as the antibiotic residues penicillin G, streptomycin and oxytetracycline. These substances were not detected in any of these foods.
- Both this report and the detailed supplementary information can be downloaded from the FSANZ website at [www.foodstandards.gov.au](http://www.foodstandards.gov.au).

## FSANZ Board meets with ACA



(left to right), Hon Rob Knowles (Chair FSANZ Board), Louise Sylvan (CEO, Australian Consumers' Association) and Elaine Attwood (Consumer Representative FSANZ Board) at a recent Board meeting in Canberra.

## What is FSANZ?

Food Standards Australia New Zealand (FSANZ) protects the health and safety of the people in Australia and New Zealand by maintaining a safe food supply.

We are a bi-national independent statutory authority that develops food standards for composition, labelling and contaminants, including microbiological limits, that apply to all foods produced or imported for sale in Australia and New Zealand.

In Australia, Food Standards Australia New Zealand develops food standards to cover the whole of the food supply chain – from paddock to plate – for both the food manufacturing industry and primary producers.

Food Standards Australia New Zealand works in partnership with Australia's Commonwealth, State and Territory governments and the New Zealand Government. We also seek to engage industry, consumers and public health professionals in our work.

## Contact details

### Australia

PO Box 7186  
Canberra BC 2610  
Australia

### New Zealand

PO Box 10559  
Wellington 6036  
New Zealand

Ph: +61 2 6271 2222  
Fax: +61 2 6271 2278

[www.foodstandards.gov.au](http://www.foodstandards.gov.au)  
Email:  
[info@foodstandards.gov.au](mailto:info@foodstandards.gov.au)

Ph: +64 4 473 9942  
Fax: +64 4 473 9855

[www.foodstandards.govt.nz](http://www.foodstandards.govt.nz)  
Email:  
[info@foodstandards.govt.nz](mailto:info@foodstandards.govt.nz)

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# Chief Scientist Dr Marion Healy discusses contaminants in food

In recent years, FSANZ has been confronted with several food safety issues, international in nature, involving food contaminants. Notable examples have been acrylamide and chloropropanols. These issues required a rapid evaluation of the available scientific information to determine the risk to public health and safety in Australia and New Zealand, and if necessary, implementation of measures to mitigate the risk.

Contaminants in food occur unintentionally and may arise from environmental contamination (eg dioxin, lead, cadmium) or from production, processing, treatment, packaging, transport or storage of food (eg aflatoxin, vinyl chloride, chloropropanols, acrylamide). The presence of contaminants is not always known and thus ongoing surveillance is necessary.

FSANZ's approach in regulating contaminants is based on the internationally agreed principle that the levels in food should be safe and as low as reasonably achievable. The safe level of a contaminant is established using toxicological studies to determine that level which gives no observed adverse health effect.

Safety factors are then applied to estimate the intake level below which there is no appreciable risk, taking account of exposure to the contaminant from both food and non-food sources.

It is therefore critically important that the dietary intake of the contaminant via the food supply can be determined. FSANZ determines intake through modelling procedures using custom-built software that contains data sets on food consumption, food chemical concentrations and safe levels.

A major limitation in undertaking the modelling studies is access to information on the levels of the contaminant in the Australian and New Zealand food supply. FSANZ uses information based on similar diets in other

countries, information collected in New Zealand and/or directly collects information within Australia. In the case of chloropropanols, data was available both from other countries and from direct testing commissioned by FSANZ.

Development of appropriate measures for managing the risk to health from those contaminants with carcinogenic potential requires a good understanding of the mechanisms by which the contaminant causes cancer. Some contaminants cause tissue damage resulting in pathological changes. In these cases, it is possible to establish a threshold level and require exposure to the contaminant to be below this level.

Contaminants may also cause carcinogenic effects via gene mutations. Here, the threshold level is generally unknown, although likely to be low, and the levels of these contaminants in food should be kept as low as possible.

A range of measures can be used to manage the health risk of contaminants in food. These include establishing standards for maximum levels of contaminants in food, coordinating the recall of risky food from the marketplace, requesting enforcement activity from the jurisdictions and providing advice to consumers.

FSANZ has a proactive approach to identifying and responding to emerging food safety issues. Good linkages have been established at both the domestic and international levels to access information from a broad range of surveillance activities and to alerts about food being recalled from the marketplace.

FSANZ responds to these emerging food safety issues on the basis of the available scientific information, noting that in some cases scientific information continues to be released that FSANZ reviews on an ongoing basis.

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**Phone** +61 3 9278 1144  
**Fax** +61 3 9278 1145  
**Mail** Po Box 447, South Melbourne Victoria  
**On-line** <http://anzfa.anstat.com.au>