

Foods requiring pre-market clearance: genetically modified food, irradiated food and novel food

Australia and New Zealand are reputed to have one of the safest food supplies in the world. However, increased global trade in food is introducing us to new foods with potential new risks. Such risks may also arise through new technologies that are increasingly being applied to food production.

The role of the Australia New Zealand Food Authority (ANZFA) is to protect public health and safety by ensuring a safe food supply. ANZFA has developed a number of standards within Part 1.5 of the *Australia New Zealand Food Standards Code* that require pre-market safety assessments and clearance of all foods that have not traditionally been part of our diet or are derived through recently developed technologies. These standards govern novel foods (**Standard 1.5.1**), genetically modified foods (**Standard 1.5.2**) and irradiated foods (**Standard 1.5.3**). The full standards are available on the ANZFA web site.

Pre-market safety assessments

No novel, irradiated or genetically modified food is permitted for sale in Australia and New Zealand unless they have passed a pre-market safety assessment by ANZFA. Food manufacturers are required to supply ANZFA with scientific information that satisfies specifications outlined in the relevant standard. This information is carefully examined by ANZFA scientists and supplemented by information derived from the world's scientific literature and, in many cases, external experts. Once a new food regulated under one of these standards has completed the safety assessment process, a report is released for public comment. The food is added to the relevant standard and allowed for sale once approved by the food standards ministerial council.

This procedure has proved particularly robust in dealing with genetically modified (GM) foods. Currently permission exists for the use of a number of GM varieties of corn, potato, soy, sugar beet, canola and cotton in the Australia and New Zealand food supply (see ANZFA web site for more information).

Labelling of genetically modified (GM) foods

In November 2000 the food standards ministerial council approved changes to extend the labelling requirements for GM foods. These changes were put in place to enable consumers to identify foods with GM ingredients.

Under the amended standard, food or food ingredients must be labelled with the words 'genetically modified' if genetic material or protein from the genetic modification is present in the final food.

A number of exemptions exist for the labelling of GM food. These include:

- Where a GM food has been refined and the effect of the refining process removes GM components – novel DNA and/or novel protein.
- Where a GM processing aid or additive is used during manufacture and carries no GM components (novel DNA and/or novel protein) into the final food.
- Where a flavour contains GM components and is present in the food in a concentration no more than 1g/kg (0.1%); and
- Where a food or ingredient contains genetically modified food that is unintentionally present in a quantity of no more than 10g/kg (1%) per ingredient.

- Food intended for immediate consumption, which is prepared and sold from food premises and vending vehicles, including restaurants, take away outlets, caterers, or self-catering institutions.

To determine if your food or ingredients are from a permitted GM commodity, and if it needs to carry GM labelling refer to the user guide to Standard 1.5.2 on the ANZFA web site. See below for contact details.

Novel foods

A novel food is a food that does not have a history of significant human consumption in Australia or New Zealand and for which there is insufficient knowledge in the broad community to enable safe use.

The purpose of this standard is to ensure that these foods will undergo a risk-based safety assessment, according to ANZFA's safety assessment guidelines, before they are offered for sale in Australia and New Zealand.

Phytosterol esters are currently an example of novel foods in Australia and New Zealand regulated under the novel food standard. Phytosterol esters are naturally present in low concentrations in vegetable oils. When they are concentrated they have been shown to have a lowering effect on blood plasma cholesterol. As these concentrated phytosterol esters do not have a history of consumption in Australia or New Zealand, a safety assessment was required for this food under the standard.

Irradiated foods

The irradiation of foods, ingredients or components of food is prohibited in Australia and New Zealand unless a specific permission is given under this standard. Irradiation is considered for use where the public health benefit of using irradiation is greater than the use of any other technology. For example, irradiation may be used rather than having to use a pesticide on a particular food product because the benefits of using irradiation outweigh the benefits of using the chemical pesticide. There are currently no foods in Australia or New Zealand permitted to be irradiated.

The standard sets out the way food irradiation is to be carried out and allows for strict controls on the use of this technology. Irradiated food must be labelled to indicate that the food or a particular ingredient has been irradiated.

Further information

Electronic versions of *Australia New Zealand Food Standards Code*, user guides and fact sheets can be obtained from the ANZFA website at www.anzfa.gov.au or www.anzfa.govt.nz.

Hard copies of the *Code* and the complete set of user guides may also be purchased from Anstat on 03 9278 1144. Hard copies of fact sheets are available from ANZFA's Information Officer in Australia on 02 6271 2241 or in New Zealand on 04 473 9942.

Businesses may currently obtain specific advice on standards in the joint *Code* through the Code Information Helpline on 1 300 652 166 (Australia) and 0 800 441 571 (New Zealand) or by e-mail at advice@anzfa.gov.au.

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