

Health and national food standards: Case Study

Access to safe and nutritious food is key to sustaining life and promoting good health. Unsafe food – containing harmful bacteria, viruses, parasites or chemical substances – can cause more than 200 different diseases, ranging from diarrhoea to cancers. According to the World Health Organisation, each year an estimated 600 million people – almost 1 in 10 – fall ill after eating contaminated food, resulting in 420,000 deaths and the loss of 33 million healthy life-years. Food standards help protect people from such diseases and, for over 30 years, NHMRC was responsible for developing national food standards for Australia. This responsibility now belongs to Food Standards Australia New Zealand (FSANZ).



Origin Development Collaborations Results and Translation Outcomes and Impacts

Food standards are important as they:

- protect public health and safety by helping to prevent foodborne illness
- provide consumers with information on which to base food choices
- ensure transparency about the quality, nature and composition of the food being sold
- assist food manufacturers to consistently and efficiently provide Australians, and our export markets, with high quality food.

In 1901, the Australian colonies federated to form the Commonwealth of Australia, but responsibility for food standards remained with the states. This led to inconsistencies in standards across the nation.

Positive steps were taken in 1909, 1913 and 1922, when Australian governments held conferences to frame uniform national food standards. In 1925, a Federal Royal Commission on Health considered whether there should be a federal food standards committee under Commonwealth legislation.

The Commission ultimately recommended the establishment of a Federal Health Council (NHMRC's precursor), to enable inter-government cooperation in a range of areas of public health including food standards. However, progress towards the development of national food standards was delayed by the Great Depression and the Second World War.

Food standards and fortification
Food standards can also lead to improvements in population health by requiring that a vitamin or mineral be added to food when dietary intakes are, or are likely to become, inadequate. For example, in Australia, food standards require the fortification of bread-making wheat flour with thiamin (Vitamin B1) (since 1991), and folic acid (Vitamin B9) and iodine (since 2009).

In 1952, NHMRC undertook to cooperate with the recently formed Council of Australian Food Technology Associations (CAFTA) to work towards interstate agreement to resolve 'anomalies in State food and drug legislation'.

In 1954, NHMRC established a Food Standards Committee to make recommendations on standards for the description, safe manufacture, composition, packaging, labelling, storage, transportation, display, advertising and sale of food for human consumption. These standards were then subject to discussion and approval at the state level before being adopted in law by the states. The Committee was chaired by Professor Fritz Reuter of the University of New South Wales, a member of CAFTA.

Over the next three decades the Committee met regularly to consider and develop standards for most of the food types that we are familiar with today. These included: drinks such as coffee, tea and soft drinks; meat products including seafood; dairy products; spices and condiments; margarine, jams, preserves and honey; chocolate and confectionery; edible oils; and food additives such as food colouring, baking compounds and meat branding inks. The dates of some of these discussions are shown in the timeline below.

The Committee also considered a number of issues that have since become of particular concern to consumers and to governments, including:

- the fortification of food with vitamins
- nutritional content labels on food packaging
- date-marking of packaged foods.

The work of the Food Standards Committee predominantly involved commenting on and then making recommendations about draft proposals for uniform food regulations that had been developed by CAFTA.

CAFTA, in turn, had developed the draft proposals after first surveying its members to find variations in food law across the states, and then obtaining consensus amongst its members as to what the standards should be.

The Committee's output of draft standards was 'voluminous' and so much so that states could fall months behind in considering the recommendations of the Committee and including recommendations within their printed Food Regulations.

In recognition that improvements were needed in this system, in 1975, Australian health ministers agreed to establish a Joint Food Legislation Working Party to draw up Model Food Legislation for uniform application throughout Australia.



Credit: Stock image

In 1980, a Model Food Act, covering sale and food preparation offences, labelling and hygiene requirements, regulation, administration and enforcement, was agreed to by the Conference of Health Ministers.

Then, in 1986, the Commonwealth, states and the Northern Territory agreed to form a National Foods Standards Council, whose members would be ministers from each jurisdiction. The Council's role would be to approve standards formulated by NHMRC and embodied within an Australian Food Standards Code, after which the standards would be incorporated into law or regulations within each jurisdiction's own Food Act.

In 1991, the Commonwealth passed the National Food Authority Act, the first federal legislation enacted to unify food standards in Australia. The legislation established a National Food Authority (NFA) to prepare food standards and, working with the states and territories, to educate the community and conduct research into food and its uses.

This body is now known as Food Standards Australia New Zealand (FSANZ) and is responsible for the current Australia New Zealand Food Standards Code.

While NHMRC's role in developing food standards ended in 1991, in 1988 NHMRC commenced a review of scientific evidence to make modifications to the Dietary Guidelines for Australians, for which it is now responsible, and which it is reviewing again in 2021.



As a consequence of uniform national food standards, Australia's food regulation system is regarded as world-class, and this gives our food export industry a competitive advantage. Overseas, Australian food products have a reputation for being produced under the highest quality standards.

The biennial Australian Total Diet Study – which is currently undertaken by FSANZ but which NHMRC initiated in 1970 as the Australian Market Basket Survey – has consistently found that Australian dietary exposures to pesticide residues and contaminants are well below Australian or international reference health standards and do not represent a public health or safety risk.

The Australian Institute of Health and Welfare has reported positive public health outcomes resulting from folic acid and iodine fortification. The incidence of disorders related to thiamine and folate deficiency has declined since fortification.

Australian governments continue to prioritise food safety and diet-related health through mechanisms such as:

- *Bi-National Food Safety Network and Food Incident Forum* to enable a rapid response to national incidents (such as the 2018 national strawberry tampering incident)
- *OzFoodNet* program, a national network of epidemiologists established in 2000 to collaborate to investigate and respond rapidly to outbreaks of foodborne disease, for which there are mandatory reporting requirements
- *Australia's Foodborne Illness Reduction Strategy 2018-2021+*, endorsed in June 2018 by the Australia and New Zealand Ministerial Forum on Food Regulation
- extension of food safety standards to specific risk based interventions for high risk sectors.



NHMRC Food Standards Committee
For over 30 years, NHMRC's Food Standards Committee (FSC) worked to develop national food standards. Its membership included the following personnel.

Professor FH Reuter (Chair)
Professor Fritz Henry Reuter (1905-2001) was Professor of Food Technology at the University of New South Wales from 1952-1970 and was FSC Chair from 1954-1974.

Mrs J Coy
Nutritionist, Department of Health Services, Tasmania (FSC 1969-1974)

Dr RHC Fleming
Director, Food and Nutrition Section, Commonwealth Department of Health (Deputy Chair and Convenor, FSC 1968-1978)

Mr WR Jewell
Chief Chemist, Victoria (FSC 1954-68)

Dr JF Kefford
Division of Food Preservation, CSIRO (FSC 1957-1969)

Mr JG Krigsman
Product Manager, Albright and Wilson Pty Ltd, Victoria (FSC 1961-73)

Mr D Kruger
Chief Health Inspector, Health Services, Australian Capital Territory (FSC 1964-74)

Dr VM Lewis
Director, Master Foods of Australia Pty Ltd Sydney (FSC 1961-1972)

Mr W Madgwick
Chief Food Inspector, Department of Public Health, New South Wales (FSC 1961-1973)

Dr RC McCarthy
Secretary, Food and Drug Advisory Committee, South Australia (FSC 1961-1969)

Mr C Murray
Chief Food Inspector, Department of Health, Queensland (FSC 1966-1974)

Mr ES Ogg
Government Analyst, Department of Public Health, New South Wales (FSC 1957-68)

Mr GL Robinson
Assistant Chief Inspector, Department of Public Health, South Australia (FSC 1970-78)

Mr IH Smith
Assistant Secretary, Commonwealth Department of Primary Industry (FSC 1957-1972)

Mr RC Stanhope
Senior Chemist and Food Technologist, Department of Health, Victoria (FSC 1969-1974)

Mr JP Warry
Chemist, Commonwealth Department of Health (FSC 1961-1967).