



Food Safety in Australia – national standard for seed sprouts

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Outline

Food regulatory system

FSANZ and standard setting

Developing a seed sprout standard

- *public health risk*
- *scope*
- *requirements*



Food Standards Australia New Zealand (FSANZ)



Australian Government agency set up to develop and review food standards for Australia and New Zealand.

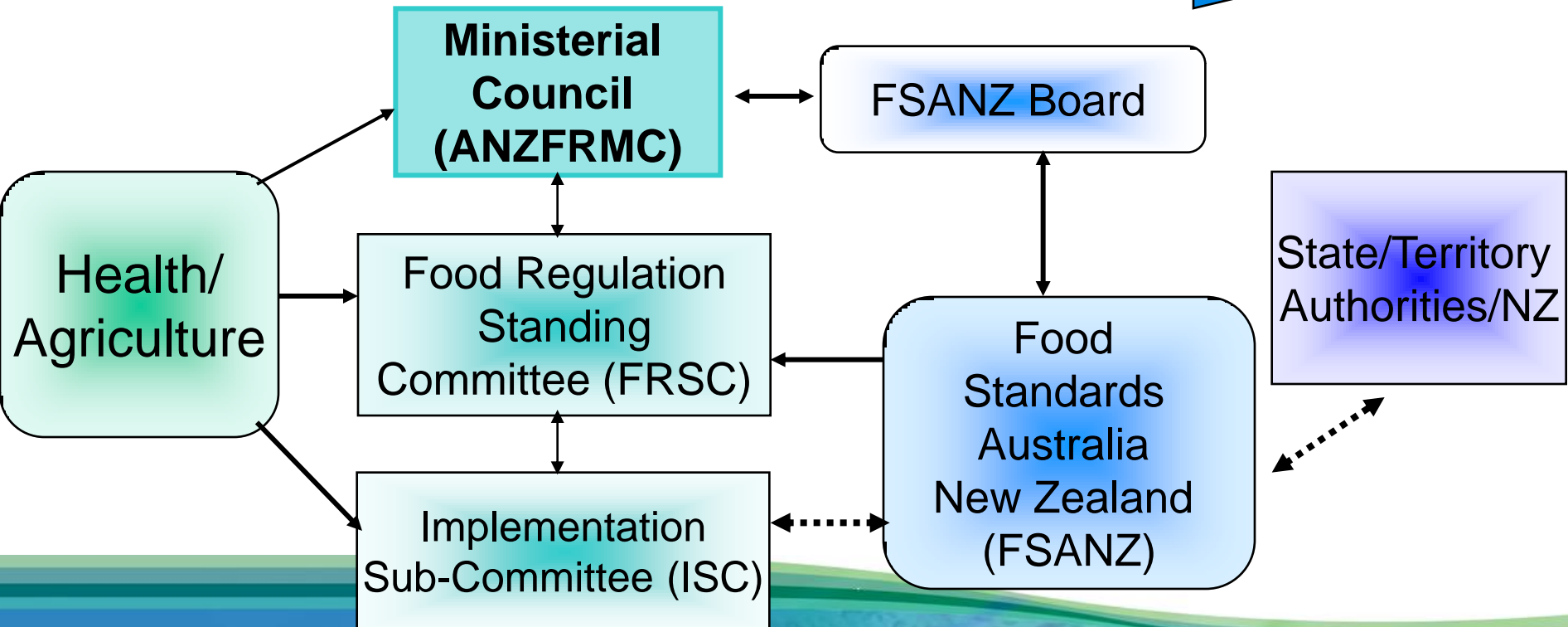
Receives policy guidelines from a Ministerial Council and objectives from the FSANZ Act.

Operates under the principle of minimum effective regulation.

Underpins all regulatory decisions with the best available science and other evidence.

Maintains transparency in all its work.

Overview of the Food Regulatory Framework



What does FSANZ do?

- FSANZ develops food standards for the composition and labelling of foods sold in NZ and Australia
- In Australia, FSANZ also develops food standards for food safety and primary production
- Coordinates national food surveillance in Australia and a national food recall system
- Works closely with the Australian Quarantine and Inspection Service (AQIS) to ensure imported food is safe
- Collaborates with other government food regulatory bodies to ensure consistency in standards setting

Australia New Zealand Food Standards Code



FSANZ objectives when developing or reviewing food standards

- ✓ Protects public health and safety by maintaining a safe food supply.
- ✓ Provides consumers with information about food so they can make informed choices.
- ✓ Prevents misleading and deceptive conduct.

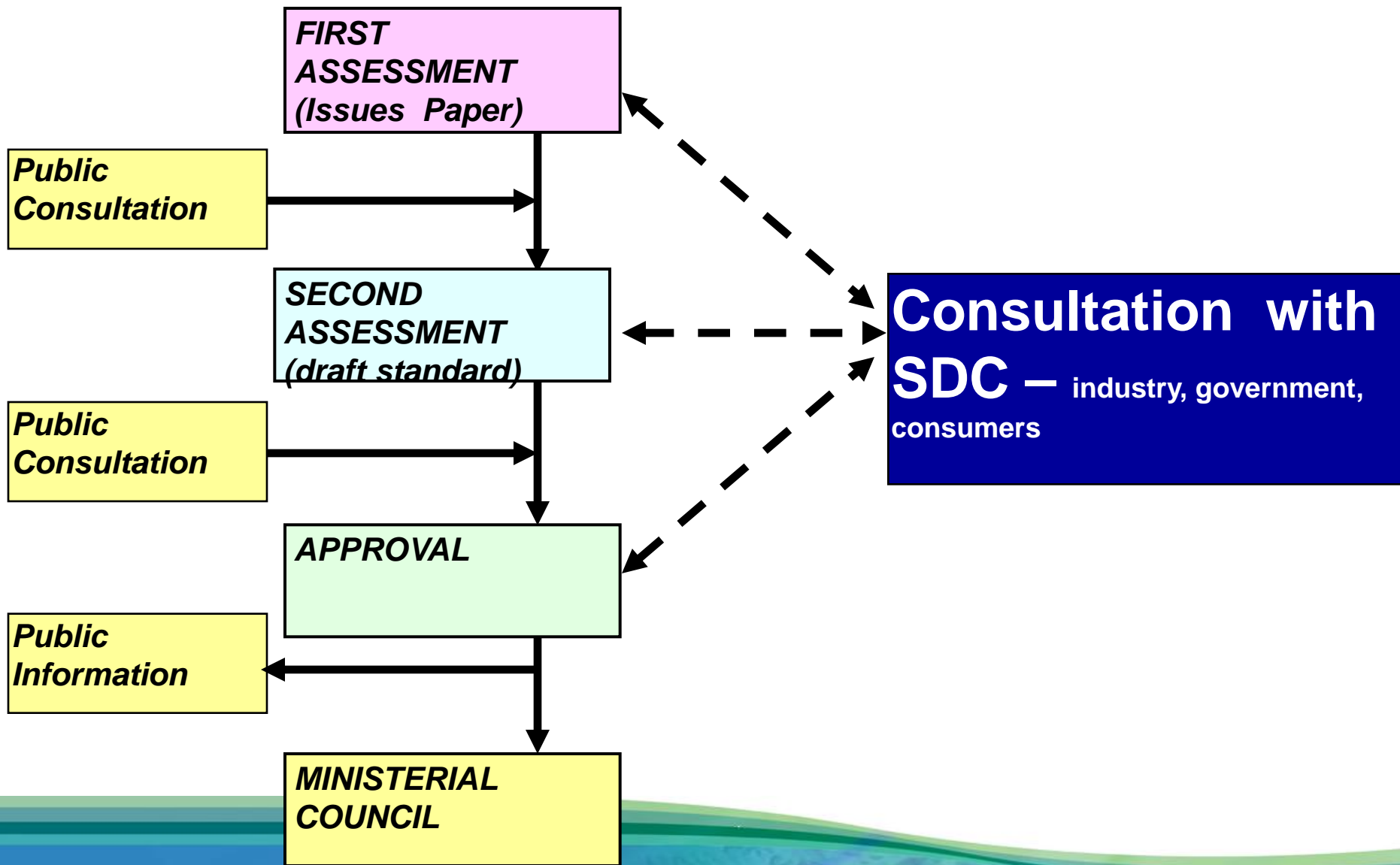
Standards Setting Process

- Evidence based
- Based on risk analysis model –
risk assessment, risk management and risk communication
- Consultative
- Economic and Social Analysis
- International

Primary Production and Processing Standards

- Outcomes-based standards
- Consistent regulatory approach
- Consistent with Codex standards
- Address food safety across entire food chain
- Facilitate trade
- Comply with WTO obligations
- Promote consumer confidence
- Cost commensurate with level of risk
- Regulatory framework applies to extent justified by market failure
- Facilitate collaboration among enforcement agencies

Government, Industry and Consumer Input

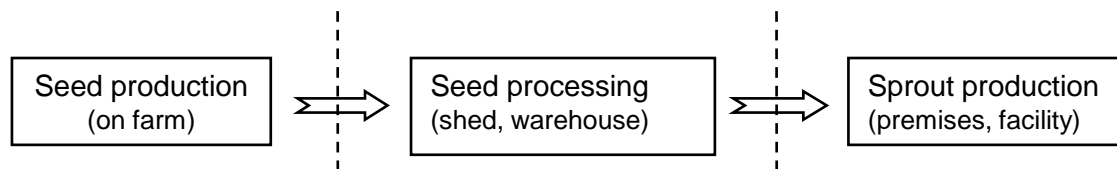


Why a standard for seed sprouts?

- Progressively addressing all primary sectors
- Public health risk
 - 1988-2008 >40 outbreaks worldwide
 - 2005-2006 2 Salmonella outbreaks in Australia
- Salmonella and EHEC main concern
- Microbiological surveys in Australia confirm pathogen presence
- Cost of food-borne illness attributable to seed sprouts ~\$1.19 million (2005-2006 outbreak)
- Industry association sought government intervention and development of regulatory measures

Industry Profile

- Sole proprietorships, partnerships and family owned businesses
- Seed producers mainly supply for agricultural and non sprout customers
- 30 seed processors identified as supplying at least some of their seeds for sprouting purposes
- ~ 40 sprout producers nationally



Scope - In

- Capture types of seed sprouts that are ready to eat and particularly high risk
- Proposed definition 'seed sprouts are sprouted seeds or beans for human consumption, that include all or part of the seed' Alfalfa, mung bean, broccoli, radish, onion)
- Seed likely source of contamination of seed sprouts
 - contaminated in field, during harvest, storage or transportation.
 - seed decontamination can reduce but not totally eliminate pathogens
 - pathogens can grow to high numbers during seed germination and sprout growth phase
 - relevant for seed sprouts in which parts of the seed or seed husk remain as a component of the final ready to eat product.

Scope - Out

- Sprouted cereal grains used for brewing (e.g. malts of barley, oats, sorghum, wheat etc.) or for juice making (e.g. wheat grass) are excluded from the scope.
- Microgreens
- Snow pea sprouts and snow pea shoots
- Will be addressed in future plant product standard

Existing requirements for seed production and seed processing

- Export Control (Plant and Plant Product) Orders 2005
- Code of Hygienic Practice for Whole Mung Beans
- The *Australia New Zealand Food Standards Code*.

Existing requirements for sprout production

- *Australia New Zealand Food Standards Code*, Chapter 1 – General Requirements
- NSW Food Regulation 2004 , Plant Products Food Safety Scheme and associated Plant Products Safety Manual (sprout producers in NSW only)
- Australian New Zealand Sprouters Association, Guidelines for Australian and New Zealand Sprout Producers, July 2008
- Retailers Quality Assurance requirements, for example Woolworths (2007) WQA Product Category Requirement – Produce.

Gaps in existing requirements – seed production and processing

- Appropriate hygienic requirements on farm, adequate design and construction of facilities and operation and hygiene requirements.
- No existing regulatory or industry requirements for the production and processing of any other types of seed used for sprout production such as onion seed, broccoli seed and radish seed.

Gaps in existing requirements – sprout production

- No existing legislative requirements in most States specifically applying to sprout production
- 6 of 30-40 sprout producers legally required to implement food safety program
- Guidelines for Australian and New Zealand Sprout Producers
 - Voluntary
 - low level of uptake by industry members
- Retailers' requirement for management systems

Control measures – seed production

- GAP (correct use of chemicals, maintenance and cleaning of farm equipment and machinery)
- Managing potential contamination from animal effluent through removal of grazing animals from paddocks (completely or within a minimum time from harvest) and similar controls on the application of fertilisers/manures
- Segregation of seed grown for agricultural purposes from seed grown for human consumption
- Storage of seed so that it is inaccessible by pests or other sources of contamination

Control measures – seed processing

- Adequate design, construction and maintenance of premises and equipment (for food purposes)
- A traceability system (supporting segregation of seed for food/sprouting purposes from other seed)
- Pest control program
- Health and hygiene requirements for personnel
- testing of seed lots for presence of microbiological pathogens
- Management of inputs (including chemical)

Proposed measures – sprout production

- Adequate design, construction and maintenance of premises and equipment to prevent/minimise contamination
- Implementation of health and hygiene practices of workers to prevent/minimise contamination
- Implementation of cleaning and sanitising programs
- Implementation of sampling/testing programs
- Control of pests
- Management of inputs (water and chemicals) to prevent/minimise contamination
- Appropriate skills and knowledge of workers for the activities they undertake
- Traceability system

Scope of regulation

Seed producers, seed processors and sprout producers

- potential for significant costs to seed producers and seed processors
- practicality and effectiveness of regulating seed processors is uncertain
- Not cost effective and go against the principles of minimum necessary regulation
- Recommend seed producers and seed processors not be subject to regulatory requirements.

Sprout producers only

- Costs of AUD150,000 upfront and AUD 455,000 per year
- Estimated benefits are AUD55,000 – AUD390,000 per year
- Low likelihood high consequence event with extremely uncertain outcomes.
- Australian New Zealand Sprouters Association has requested development of regulatory measures

Description of the draft Standard

- Demonstrate control of potential food safety hazards
- Produce safe sprouts through ensuring that the hazards arising during sprout production are managed
 - Specific hazards associated with the seed and from inputs during production and processing
- Effective decontamination processes for seed and sprouts must be implemented
- Control measures should be validated and monitored to verify that they are working.
- Sprout producers will be required to comply with the requirements of Standards 3.2.2 and 3.2.3 (hygiene, premises and equipment)
- Traceability requirement

Summary

- Reduce the risk of food-borne illness due to consumption of sprouts
- Protect health and safety of sprout consumers
- Improve the safety of seed sprouts
- Avoid unnecessary costs /burden on industry



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