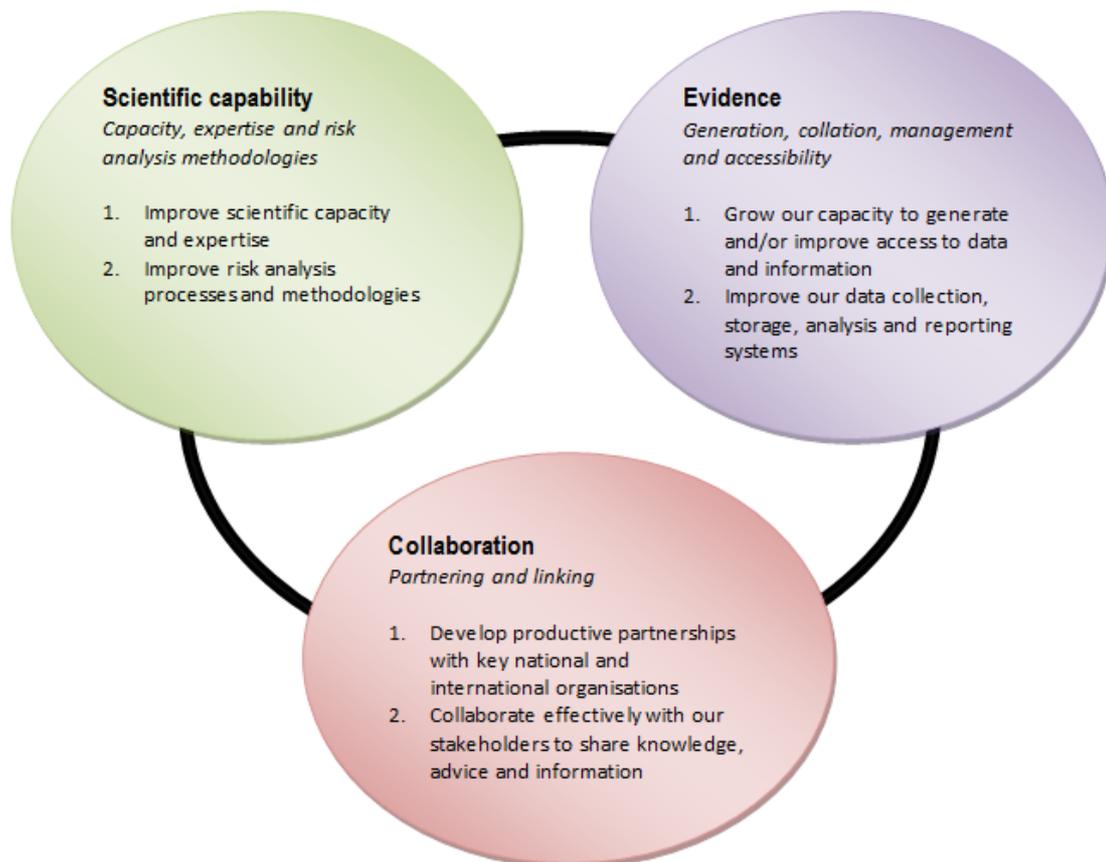# Food Standards Australia New Zealand

Science Strategy Implementation Plan 2017–18

12 MONTH FORECAST OF ACTIVITIES

Overview of FSANZ Science Strategy 2017–2021

AIM
Developing and enhancing our scientific capabilities, tools and partnerships to meet our current and future needs

Scientific capability
Capacity, expertise and risk analysis methodologies

1. Improve scientific capacity and expertise
2. Improve risk analysis processes and methodologies

Evidence
Generation, collation, management and accessibility

1. Grow our capacity to generate and/or improve access to data and information
2. Improve our data collection, storage, analysis and reporting systems

Collaboration
Partnering and linking

1. Develop productive partnerships with key national and international organisations
2. Collaborate effectively with our stakeholders to share knowledge, advice and information

Strategic Area 1: Scientific capability

Strategic Aim 1: Improve scientific capacity and expertise	
Component / Activity	**Timeframe**
Recruit adequate in-house capacity and expertise in: - **Data science** - **Regulatory economics, behavioural and consumer sciences** - **Systematic reviews and meta-analyses** - **Food contact materials and new technologies**	
Identify potential roles for external consultant(s) and procure suitable expertise. May include:	Ongoing
• Recruiting two new FSANZ Fellows with expertise in the areas of *toxicology* and *social science*	September 2017
• Identifying suitable expert to recruit through the FSANZ Fellows program with expertise in the area of *Data Science*	End of June 2018
• Establishment of Expert Advisory Group on New Breeding Techniques to provide advice and information in relation to the review of Standard 1.5.2 and/or new breeding techniques pertaining to the current science, any safety related issues and stakeholder concerns.	June 2017 and October 2017
• Re-establish Panel of Analytical Laboratories for consultation in relation to analytical programs.	1st quarter 2017–18
• Recruiting new Social Science Economics Advisory Group (SSEAG) member(s)	By end of June 2018
Support professional development in above key fields to improve technical and non-technical capabilities	
Attend relevant conferences, workshops, events. Some key activities are:	
• 67th Australasian Grain Science Conference, Christchurch	September 2017
• High Value Nutrition Conference, Auckland	September 2017
• 7th International Symposium on Delivery of Functionality in Complex Food Systems Auckland	November 2017
• 10th Asia Pacific Conference on Clinical Nutrition, Adelaide	November 2017
• IFT Food Expo 2018 Food Science & Technology	July 2018

Strategic Area 1: Scientific capability

Strategic Aim 1: Improve scientific capacity and expertise	
Component / Activity	**Timeframe**
• 12th International Food Data Conference and the 21st International Congress of Nutrition	October 2017
• Dietitians Association of Australia 35th National Conference	May 2018
• The Government Open Data Community Forum	Ongoing – approx. every 6 weeks
Provide in-house training and work experiences including:	
• Regular in-house seminars as part of the FSANZ Seminars Series program, conducted by both external presenters and FSANZ staff.	Ongoing
• Internal staff secondments between sections, as appropriate.	Ongoing
Provide training relating to the implementation of the Data Management Strategy. Anticipated activities include:	Ongoing
• In-house training on the use of the data registry systems (by the DCRG)	2nd quarter 2017–18
• In-house training on the use of Silo	December 2017
• In house-training related to the Electronic Data Records Management System and SharePoint	Ongoing
Update and publish Dietary Exposure Assessment (DEA) methodologies on FSANZ website.	June 2018
Participate in interagency professional development activities in regulatory science through the Regulatory Science Network.	Ongoing
Ensure internal and external peer reviews of FSANZ's scientific outputs, systems and practices	
Seek formal peer review of key scientific risk assessments, reports and other outputs. Anticipated reviews include:	Ongoing

Strategic Area 1: Scientific capability

Strategic Aim 1: Improve scientific capacity and expertise	
Component / Activity	**Timeframe**
• One systematic review (resistant starch and blood glucose) to be considered by the Health Claims Scientific Advisory Group.	3rd quarter 2017–18
• Peer review of norovirus hazard identification by South Australian Research and Development Institute.	August 2017
• Anticipated peer review of imported food risk assessment tool by Prof Mark Tamplin (FSANZ Fellow).	October 2017
• 25th Australian Total Diet Study (ATDS)	2nd quarter 2017–18
• Peer review of W1108 – Sugar Labelling Program of Work Rapid Evidence Assessment	August 2017
• Peer review of W1113 – Rapid Evidence Assessment of Fats and Oils Labelling	January 2018
Progress activities in support of the performance measures baseline assessment for this strategic aim	
Anticipated actives include:	
• Further evaluation of the observations identified from the external review of this work; determine key areas to focus on; set goals; develop an implementation plan.	1st–2nd quarter 2017–18
• Identify and engage relevant external expertise in relation to the performance measure in this area; progress activities identified in the implementation plan.	3rd–4th quarter 2017–18

Strategic Area 1: Scientific capability

Strategic Aim 2: Improve risk analysis processes and methodologies	
Component / Activity	**Timeframe**
Develop and implement a graduated risk analysis approach	
Continue to embed the recommendations that were identified during 2015-16 for a graduated risk analysis approach for the agency into the work undertaken at FSANZ, including into the revised Emerging Issues framework.	Ongoing
Develop and refine tools used to undertake risk analysis	
As part of Harvest Phase 4, finalise and implement phase 1 of Silo (the ANDB replacement) for FSANZ food composition data, which supports DEA capabilities.	September 2017
Silo phase 2 – review product backlog and prioritise future Silo development work. The next phase of Silo development will most likely focus on implementing FoodEx2 as a means of classifying foods and enabling the storage, compilation and reporting of non-nutrient scientific datasets identified for incorporation.	July 2018
Improve tools to support regulatory economic analysis – Cost of Illness Model and Label Cost Model.	Ongoing
Further explore methodologies for the collection of data on consumer and producer behaviour and regulatory analysis.	Ongoing
Apply the most appropriate statistical methodology for the meta-analysis of data in studies identified by systematic reviews, when relevant. Anticipated activities include: • Continued in-house training and regular round table discussions.	Ongoing Ongoing
Undertake a review of the FSANZ Emerging issues Framework, including undertaking in-house workshop(s) reviewing the purpose and scope of this framework.	1st and 2nd quarter 2017–18
Increase in use of a variety of sources of evidence to help inform risk management decisions	
Undertake follow up on P1028 consumer research on infant formula.	1st quarter 2017–18
Exploring methodologies and further improving tools to support consumer and regulatory economic analyses.	Ongoing

Strategic Area 2: Evidence

Strategic Aim 1: Grow our capacity to generate and/or improve access to data and information	
Component / Activity	**Timeframe**
Using external data sources, critiquing, validating and incorporating validated data to the FSANZ evidence base	
Continued use of a systematic approach to the identification of relevant scientific data/studies. This is particular relevant for the assessment of food-health relationships and chemical/nutrient risk assessment and is likely to be of value to other areas in FSANZ.	Ongoing
Obtain nutrient data from the food industry for incorporation into FSANZ food composition databases, in a format which meets FSANZ's requirements for data and metadata quality.	Ongoing call for data
Depending on the availability of resources, FSANZ will undertake dietary exposure assessments of mercury in fish/seafood for the Australian and New Zealand populations using updated concentration data and food consumption data from the latest national nutrition surveys.	June 2018
Prioritise surveillance activities using collaborative partnerships where possible	
Work collaboratively with other agencies to identify priority areas for generating surveillance data, in particular, with:	
• NZ MPI, under the NZ MPI Food Safety Operational Research Programme. Includes ongoing collaboration in relation to ongoing projects, and collaboration on proposed projects for funding under the 2018 round.	Ongoing
• Jurisdictions, as part of the ISFR SMWG Co-ordinated Food Survey Plan (CFSP).	Ongoing
• Discuss emerging issues and potential need for surveillance in identified areas through the International Liaison Group meetings.	Ongoing
Strengthening a microbiological evidence base for use in microbiological risk assessments	
Hold cross-agency Microbiology Discipline Group meetings to share information, identify any gaps and opportunities for collaborative microbiological work in relation to the Forum priority areas.	1st quarter 2017–18

Strategic Area 2: Evidence

Strategic Aim 1: Grow our capacity to generate and/or improve access to data and information	
Component / Activity	**Timeframe**
The FSANZ Microbiological Evidence Base Plan 2015–2019 identifies a range of activities to be undertaken to support the development of a robust and contemporary microbiological evidence base. These are:	
• Working collaboratively with existing mechanisms such as ISFR SMWG	Ongoing
• Develop guidelines and principles for microbiological data for incorporation into the FSANZ Data Management Strategy	Ongoing
• Continue to establish a framework for more systematic microbiological data generation, with preliminary minimum metadata and data elements requirements to be presented at planning workshop	Commence late 2017
• Investigate the tools for attributing risk, identifying and prioritising food/hazard pairs for imported foods.	mid–2017 – mid–2018

Strategic Area 2: Evidence

Strategic Aim 2: Improve our data collection, storage, analysis and reporting systems	
Component / Activity	**Timeframe**
Finalise and implement a Data Management Strategy (DMS) for the agency	
Continue to implement the DMS 2016–2020. Anticipated activities include:	Ongoing
• Develop the 2017–2018 DMS Implementation Plan	1st quarter 2017–18
• Continue to implement the data registry system: a central data management and retrieval system that can be scaled up, is flexible and allows for easy and convenient retrieval of data that are available in a format that is modifiable and searchable. Activities include:	1st quarter 2017–18
o Testing of the data registry system to ensure it is fit for purpose	1st–2nd quarter 2017–18
o Migrate and catalogue the scientific data into the data registry system	3rd–4th quarter 2017–18
o Communicate the existing standard operating procedures for internal data management across the agency	3rd–4th quarter 2017–18
• Develop a plan for storing non-food datasets, includes consideration of the Silo database for micro data.	3rd–4th quarter 2017–18
• Improve processes for working with data across teams, for example relating to the processing of Maximum Residue Limit (MRL) data.	3rd–4th quarter 2017–18
Make data holdings more publicly accessible (release more data into the public domain).	
Data anticipated to be published publically during the 2017–18 period include:	
• A new edition of the NUTTAB reference database (including) all analytical data generated since its last release in 2011.	December 2017
• Publish summary raw commodity consumption data for 2011–12 National Nutrition and Physical Activity Survey on the FSANZ website including a guide for use.	1st quarter 2017–18

Strategic Area 2: Evidence

Strategic Aim 2: Improve our data collection, storage, analysis and reporting systems	
Component / Activity	**Timeframe**
• Develop a plan for the publication of other similar data sets to support FSANZ's emerging role as an Information Hub. This may include food consumption data for processed food groups, recipe datasets and other relevant data.	End of June 2018
• Update the dataset that supports the online labelling tool, the Nutrition Panel Calculator with all analytical data generated since its last release in 2011	Commenced by July 2017
• Summaries of surveillance data to be published include: 25th ATDS, Plasticisers survey (including phthalates) and Mineral oils.	Late 2017
Progress activities in support of the performance measures baseline assessment for this strategic aim.	
Anticipated actives include: • Work together with the Data Custodians Reference Group, the Project Manager for the Data Management Strategy and other relevant staff to identify how to progress work in this area to improve on the baseline assessment in all areas assessed. Set goals and develop an implementation plan.	2nd quarter 2017–18
• Identify and engage relevant external expertise in relation to the performance measure set in this area; progress activities identified in the implementation plan.	3rd–4th quarter 2017–18

Strategic Area 3: Collaboration

Strategic Aim 1: Develop productive partnerships with key national and international organisations	
Component / Activity	**Timeframe**
Mapping and network analysis.	
Continue to identify the range of national and international bodies currently involved in food regulatory science, identify gaps and focus on those with who strategic alliances should be developed.	Ongoing
Leverage expertise, information and resources on food regulatory issues from key national and international organisations.	
GM food safety assessment sharing conducted by FSANZ and Health Canada: • Continue to map out and refine an administrative process for safety assessment sharing. • Undertake a joint review of a complex, nutritionally modified GM food • Prepare for implementation of the safety assessment sharing system, including identification of suitable products in the pipeline	Ongoing
Continued telecommunication with regulatory counterparts in Europe, North America and NZ to inform each other of developments and information of interest to our respective areas. Specifically set up for Health Claims. Continued to support the work of the co-chairs of the Asia Pacific Economic Cooperation (APEC) Food Safety Cooperation Forum (FSCF): • Deliver (write) an Options Paper that will outline the possible future position (operation) of the FSCF within the APEC structure. This will be done in consultation with officials from the Peoples Republic of China, Bureau of Import and Export Food Safety AQSIQ, US Trade and APEC Secretariat. • In consultation with the members of FSCF organising committee (AQSIQ and US Trade) and the Australian Department of Foreign Affairs and Trade (DFAT) discuss and plan what activities, if any, will be held in Port Moresby, Papua New Guinea during their host year 2018 (most likely during Senior Officials Meeting 2 during May 2018).	Ongoing

Strategic Area 3: Collaboration

Strategic Aim 1: Develop productive partnerships with key national and international organisations	
Component / Activity	**Timeframe**
• Continue to perform Secretariat duties for the FSCF co-chairs and act as an information channel for FSCF members and provide input to the whole of Australian Government position in relation to food safety in the APEC region.	
Underpin strategic partnerships with memoranda of understanding (MoU).	
MoU's to be considered on a case-by-case basis as required.	Ongoing

Strategic Area 3: Collaboration

Strategic Aim 2: Collaborate effectively with our stakeholders to share knowledge, advice and information	
Component / Activity	**Timeframe**
Build collaborative relationships with key stakeholder groups including: - **Relevant sectors of the food industry** - **Universities, research agencies and other academic institutions**	
Continue to collaborate with selected universities. Anticipated activities include: • As part of the student project and placement program, FSANZ expects to receive two students from the Nutrition and Dietetics undergraduate program at University of Wollongong and will also host a University of Canberra student internship.	1st and 3rd quarter 2017–18
• Visit to Massey University and/or Lincoln University.	2nd–3rd quarter 2017–18
• Continuing to build our relationship with University of Adelaide through P1028 – Infant formula social science research, as well as the joint drafting of a journal article for publication.	June 2018
• Visits to Otago University and Auckland University (food labelling focus)	1st quarter 2017–18
Continue to collaborate with food industry. Anticipated activities include:	
• FSANZ NZ to organise another field trip to engage with industry stakeholders similar to Hamilton field trip in July 2017.	Mid–Late 2018
Under the FSANZ Microbiological Evidence Base Plan 2015–2019 :	
• Establish and strengthen links with expert groups researching the use of genomic sequencing and bioinformatics, including the Peter Doherty Institute, Melbourne University and, internationally, the Global Coalition on Regulatory Science Research.	Ongoing
• Proposed collaboration with University of Sydney to undertake anti-microbial resistance (AMR) foodborne illness related project using Whole Genome Sequencing (WGS).	Late 2017

Strategic Area 3: Collaboration

Strategic Aim 2: Collaborate effectively with our stakeholders to share knowledge, advice and information	
Component / Activity	**Timeframe**
• Partner with ANU, NSWFA and other health/regulatory agencies to submit an NHMRC research proposal to attribute causes of campylobacteriosis in Australia. FSANZ to provide expert risk assessment advice relative to food safety standards and policy development within the food regulatory system.	Ongoing for 2017–18
FSANZ is hosting a staff member from the Republic of Korea, Ministry of Drug and Food Safety for 10 months.	January 2018
Continue to build our relationship with Department of Health, New South Wales Food Authority, University of Technology Sydney and Australian National University through the project to update the annual cost of foodborne illness in Australia, circa 2010.	June 2018
Progress activities in support of the performance measures baseline assessment for this strategic aim.	
Anticipated activities include:	
• Work collaboratively to determine an approach for improving on the baseline assessment; determine key areas to focus on, set goals and develop an implementation plan.	1st–2nd quarter 2017–18
• Identify and engage relevant external expertise in relation to the performance measure in this area; progress activities identified in the implementation plan.	3rd–4th quarter 2017–18

Appendix

Acronyms

ANU	Australian National University
ANDB	Australian Nutrient Data Bank
ATDS	Australia Total Diet Study
DEA	Dietary Exposure Assessment
Forum	the Australia and New Zealand Ministerial Forum on Food Regulation
GM	Genetically modified
ISFR SMWG	Implementation Subcommittee for Food Regulation Surveillance and Monitoring Working Group
NUTTAB	NUTrient TABles
NHMRC	National Health and Medical Research Council
NSWFA	New South Wales Food Authority
NZ MPI	New Zealand Ministry for Primary Industries