The Australia New Zealand Food Regulatory System:

A world-class collaborative food regulatory system focused on improving and protecting public health and safety

Horizon Scan to support the System Strategic Direction for 2023-2026

Consultation Paper

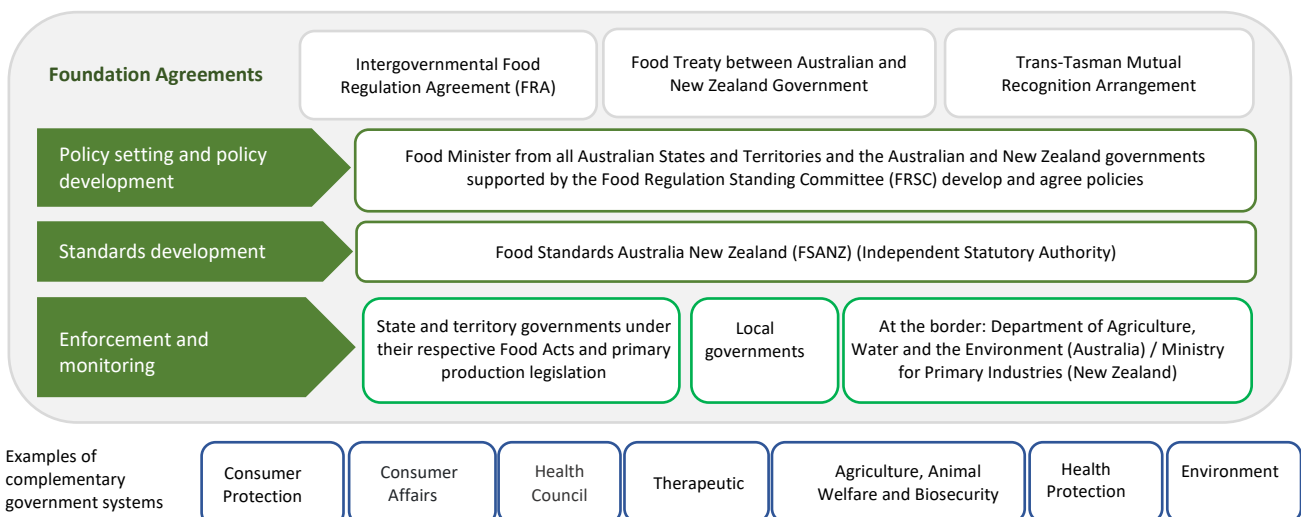## The Australia New Zealand Food Regulatory System

1. The Australia New Zealand Food Regulatory System (the System) is a unique, collaborative system led by Food Ministers from across the Australian States and Territories and the Australian and New Zealand Governments.

2. The System's work is vital in ensuring a safe and healthy food supply across Australia and New Zealand and in taking our high-quality food to the world.

3. The System is made up of laws, policies, standards and processes. Local, state/territory and national governments across Australia and New Zealand all play important roles in the System. Each of the roles have inter-dependencies and rely on collaboration with other government agencies and other regulatory systems.

4. A key feature of the System is shared accountability, with all stakeholders responsible for the mitigation of risks.

5. The System currently has three strategic priorities, which were agreed by Food Ministers in 2017. Information on the current priorities is available on the food regulation website (1).

New strategic planning process System

6. The System is currently undergoing its most significant reform and modernisation effort since its inception in the 2000s.

7. In December 2021, Food Ministers agreed to key actions to progress the reform agenda (2). One of the agreed actions was to develop and deploy a new strategic planning process that would support a regular reset of the System's strategic direction. It was agreed that this would be done via a new, more inclusive and transparent planning process.

8. The development of this 'Horizon Scan' is the first step in this new process.

9. The Horizon Scan takes a broad view of the wide food system challenges and opportunities. Your input is sought to ensure missing issues are intensified.

At a glance: the Australia New Zealand Food Regulatory System

Foundation Agreements	Intergovernmental Food Regulation Agreement (FRA)	Food Treaty between Australian and New Zealand Government	Trans-Tasman Mutual Recognition Arrangement
Policy setting and policy development	Food Minister from all Australian States and Territories and the Australian and New Zealand governments supported by the Food Regulation Standing Committee (FRSC) develop and agree policies		
Standards development	Food Standards Australia New Zealand (FSANZ) (Independent Statutory Authority)		
Enforcement and monitoring	State and territory governments under their respective Food Acts and primary production legislation	Local governments	At the border: Department of Agriculture, Water and the Environment (Australia) / Ministry for Primary Industries (New Zealand)

Examples of complementary government systems	Consumer Protection	Consumer Affairs	Health Council	Therapeutic	Agriculture, Animal Welfare and Biosecurity	Health Protection	Environment

How this consultation paper is structured

10. This consultation paper has been developed to support you to provide a submission into the Horizon Scan.

11. The paper discusses our food future in the context of seven global megatrends and is divided in three parts:

    Part 1: Provides a high-level summary of each of the megatrends.

    Part 2: Explains how the megatrends relate to the food supply. The list of challenges and opportunities is not exhaustive – it is intended to provide a synopsis of key areas we must keep an eye on. It seeks your input on what is missing.

    Part 3: Draws several conclusions and presents three consultation questions.

How to make a submission

12. We are seeking the views from all those that engage with the System.

13. Stakeholders includes:

    - consumers and consumer representative organisations
    - public health professionals and researchers
    - industries involved in each part of the food supply chain
    - regulators across all levels of government in Australia and New Zealand.

14. Your submission on the following three questions is invited:

> Q1. Are the trends, issues, risks, and opportunities affecting the broader food system accurately captured in the Horizon Scan? If you answered no, which matters have not been captured?
>
> Q2. To what extent are there activities underway within your organisation, to manage these issues and risks and to leverage these opportunities?
>
> Q3. What opportunities do you consider exist for future work or partnerships, for mutual benefit?

15. Feedback should be submitted via the Australian Government Department of Health's Consultation Hub.

16. Submissions must be received no later than midnight 7 August 2022.

17. The outcomes from this consultation will be provided to Food Ministers in late 2022, as part of setting the future strategic direction for the System.

18. While some of the matters covered in this paper fall within the scope of System to act on, other matters may not be within scope, or are not within the exclusive control of the System and would require partnering to progress. Some matters can be progressed bi-nationally, and others will require country specific consideration.

19. We look forward to receiving your submission and thank you in advance.

Part 1. Changing world around us

21. The world around us is changing rapidly. COVID-19 has disrupted almost every aspect of our lives over the last two years - affecting the very nature of how we live, work, and play. We find ourselves at a unique moment in time, and there is a heightened awareness that the decisions we make now will affect us for generations to come.

22. This paper discusses our food future in the context of seven global megatrends (patterns of change) that are anticipated to have profound implications across industry and society (2). In discussing where we are heading, we can then consider how we may shape the desired future state.

23. Below is an outline of each of the megatrends. Page 6 provides an overview on how they relate to the food supply.

More from less: More demand for limited resources

Food production must increase at the same time as resource consumption must decrease

24. The global population is growing. By 2050, the world's population is projected to rise to 9.7 billion. Global food production would need to increase by an estimated 60 percent to feed this number of people (3). However, underlying resources are being stretched beyond regenerative capacity. This includes use of fresh water, energy, and arable land, for example. To avoid the risk of global food insecurity and political instability, we will need to become better, more efficient producers and consumers of food.

Going, going … gone? Breach of environmental limits

Tackling global environmental challenges will require collaborative efforts

25. The world is facing unprecedented environmental challenges, particularly climate change and biodiversity loss. Globally, severe weather events and climate extremes are expected to increase. Similar to the previous trend, this presents challenges for global food security and political stability. However, it also creates a driver for collaboration to mitigate these challenges, and to build resilience against their adverse impacts.

Silk highway/Geopolitical tensions: Shift in global economy & fractal politics

Shifts in global geopolitical and economic landscape will test resilience and agility

26. Over the last century, developed economies have formed the 'centre of gravity' in terms of global economic output. However, coming decades will see the world economy shift towards Asia as the powerhouse (China and India) and, to a lesser extent, South America and Africa. This will fuel rapid income growth in these regions, which in turn will increase demand for diverse food offerings.

27. Growing globalisation supports technological innovation, diversity of goods and services, and lifts economies through trade. However, the growing interdependency, for example through complex global supply chains, means events overseas have a bigger impact locally. Geopolitical tensions, trade wars and economic sanctions can have far reaching consequences.

28. This in turn is likely to further drive countries to seek self-sufficiency.

Forever young: Ageing population, high chronic disease & spiralling health costs

While the global population is growing, people are also living longer, resulting in ageing population structures and high morbidity

29. The global life expectancy is rising. The resulting demographic shift will have implications for economic productivity due to proportionately smaller working age populations. It will also challenge already stressed health systems.

30. Healthcare costs are rising because people are living longer, but also because they are spending proportionately longer in ill-health due to the prevalence of chronic diseases such as type II diabetes and cardiovascular disease (high morbidity). Unhealthy food consumption is the predominant factor linked to this morbidity globally.

Virtually here: Changes to how we interact & do business

The deep immersion of people in a world that is virtual brings opportunities and challenges

31. Information technology has transformed society over the last 30 years. The creation of new capabilities is changing business models and lifestyles. The growth of the online retail sector means physical floor space is shrinking, though unlikely to ever disappear fully.

32. Connectivity has changed the way people interact, and the way they obtain information and make decisions. The ability to reach is on the one hand democratising knowledge, and on the other hand enabling misinformation and harmful influence to spread easier.

33. Governments and the private sector will need to adapt to this new reality.

Great expectations: Shift in consumer wants & needs

Rise of societal and consumer expectation for experiential rather than material goods
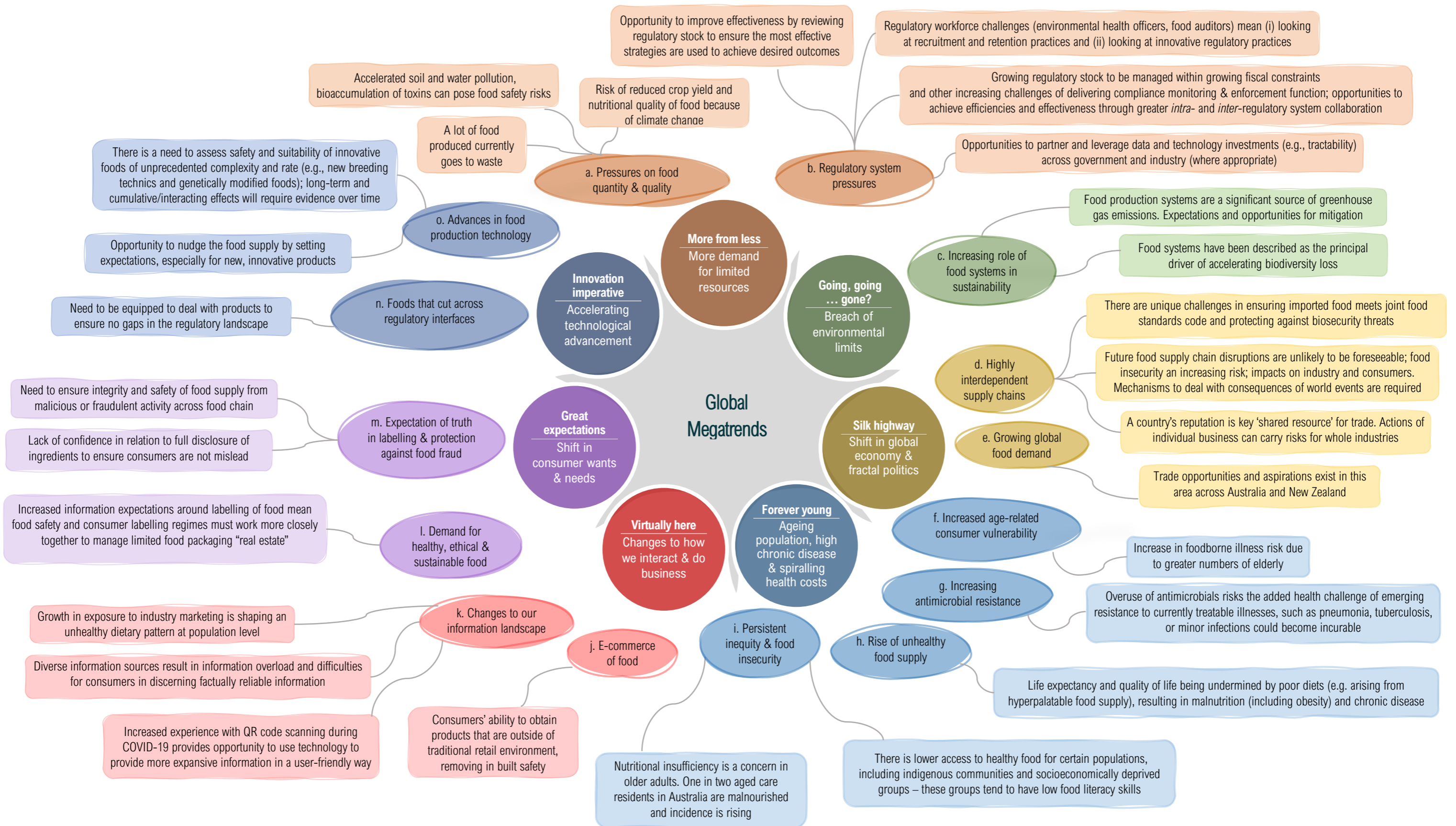
34. As incomes grow, the rise of discretionary income is allowing people to seek out products and services that they attach broader value to, beyond meeting their immediate needs.

35. For example, concerns about healthier diet choices and environmental sustainability are driving a growing interest in plant-based foods, a sector that is rapidly expanding to include plant-based alternatives for meat, dairy products, eggs and seafood (4).

36. This creates opportunities for food businesses that can leverage this trend. It also means a step-change in terms of information transparency.

Innovation imperative: Accelerating technological advancement

The coming decades are likely to see the rate of technological advance accelerate further still

37. In the context of the other trends discussed, keeping abreast of technological advancement is an economic necessity.

38. New waves of technological advances continue to create novel opportunities, while testing governments' ability to harness their benefits (such as big data) and provide prudent oversight.

Global Megatrends

More from less — More demand for limited resources

a. Pressures on food quantity & quality
- Opportunity to improve effectiveness by reviewing regulatory stock to ensure the most effective strategies are used to achieve desired outcomes
- Accelerated soil and water pollution, bioaccumulation of toxins can pose food safety risks
- Risk of reduced crop yield and nutritional quality of food because of climate change
- A lot of food produced currently goes to waste

Regulatory system pressures

b. Regulatory system pressures
- Regulatory workforce challenges (environmental health officers, food auditors) mean (i) looking at recruitment and retention practices and (ii) looking at innovative regulatory practices
- Growing regulatory stock to be managed within growing fiscal constraints and other increasing challenges of delivering compliance monitoring & enforcement function; opportunities to achieve efficiencies and effectiveness through greater *intra-* and *inter-*regulatory system collaboration
- Opportunities to partner and leverage data and technology investments (e.g., tractability) across government and industry (where appropriate)

Going, going … gone? — Breach of environmental limits

c. Increasing role of food systems in sustainability
- Food production systems are a significant source of greenhouse gas emissions. Expectations and opportunities for mitigation
- Food systems have been described as the principal driver of accelerating biodiversity loss

Silk highway — Shift in global economy & fractal politics

d. Highly interdependent supply chains
- There are unique challenges in ensuring imported food meets joint food standards code and protecting against biosecurity threats
- Future food supply chain disruptions are unlikely to be foreseeable; food insecurity an increasing risk; impacts on industry and consumers. Mechanisms to deal with consequences of world events are required

e. Growing global food demand
- A country's reputation is key 'shared resource' for trade. Actions of individual business can carry risks for whole industries
- Trade opportunities and aspirations exist in this area across Australia and New Zealand

Forever young — Ageing population, high chronic disease & spiralling health costs

f. Increased age-related consumer vulnerability
- Increase in foodborne illness risk due to greater numbers of elderly

g. Increasing antimicrobial resistance
- Overuse of antimicrobials risks the added health challenge of emerging resistance to currently treatable illnesses, such as pneumonia, tuberculosis, or minor infections could become incurable

h. Rise of unhealthy food supply
- Life expectancy and quality of life being undermined by poor diets (e.g. arising from hyperpalatable food supply), resulting in malnutrition (including obesity) and chronic disease

i. Persistent inequity & food insecurity
- There is lower access to healthy food for certain populations, including indigenous communities and socioeconomically deprived groups – these groups tend to have low food literacy skills
- Nutritional insufficiency is a concern in older adults. One in two aged care residents in Australia are malnourished and incidence is rising

Virtually here — Changes to how we interact & do business

j. E-commerce of food
- Consumers' ability to obtain products that are outside of traditional retail environment, removing in built safety

k. Changes to our information landscape
- Growth in exposure to industry marketing is shaping an unhealthy dietary pattern at population level
- Diverse information sources result in information overload and difficulties for consumers in discerning factually reliable information
- Increased experience with QR code scanning during COVID-19 provides opportunity to use technology to provide more expansive information in a user-friendly way

Great expectations — Shift in consumer wants & needs

l. Demand for healthy, ethical & sustainable food
- Increased information expectations around labelling of food mean food safety and consumer labelling regimes must work more closely together to manage limited food packaging "real estate"

m. Expectation of truth in labelling & protection against food fraud
- Need to ensure integrity and safety of food supply from malicious or fraudulent activity across food chain
- Lack of confidence in relation to full disclosure of ingredients to ensure consumers are not mislead

Innovation imperative — Accelerating technological advancement

n. Foods that cut across regulatory interfaces
- Need to be equipped to deal with products to ensure no gaps in the regulatory landscape

o. Advances in food production technology
- There is a need to assess safety and suitability of innovative foods of unprecedented complexity and rate (e.g., new breeding technics and genetically modified foods); long-term and cumulative/interacting effects will require evidence over time
- Opportunity to nudge the food supply by setting expectations, especially for new, innovative products

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Part 2. Our challenges & opportunities

39. The megatrends outlined are global in nature and are already playing out. What they mean for the System is discussed below. The list of challenges and opportunities is not exhaustive – it is intended to provide a synopsis of key areas we must keep an eye on.

40. Climate change and the associated increase in adverse weather events are already having significant effects on crop yields and food security. Rising carbon dioxide levels is another way climate change could reduce yields and nutrient concentration in staple crops such as rice, wheat, and commonly consumed vegetables (5). This raises the need for adaptation and mitigation to be considered from a food system perspective.

Reducing agricultural emissions
In May 2022, New Zealand released its first emissions reduction budget, to meet it climate goals by 2050. New Zealand aims to reduce biogenic methane emissions by 10 percent by 2030, relative to 2017 levels, and 24 to 47 percent lower by 2050.

41. Some natural toxins can be formed in food as defence mechanisms of plants, through their infestation with toxin-producing mould, or through ingestion by animals of toxin-producing microorganisms. Health effects can be acute poisoning ranging from allergic reactions to severe stomach-ache and diarrhoea, and even death (6).

42. With finite water resources demand is growing to recycle water. Risks to food safety need to be managed.

43. Accelerated soil and water pollution owing to intensive farming and/or climate change can also pose food safety risks.

44. A key area for improvement that would help with food security is tackling food waste. Globally, food waste is a considerable problem. Australia and New Zealand are no exception, with food waste costing the economies AUD$20 billion and NZ$872 million respectively each year.

Reducing food waste
The Australian *National Food Waste Strategy* provides a framework to support collective action towards halving food waste by 2030.

45. As well as production-side pressures, there are pressures on the systems that verify that food continues to be safe and suitable. Across jurisdictions, regulators are facing workforce challenges, particularly with regulatory food safety auditors and environmental health officers. Innovative regulatory practices (e.g., IT solutions) and re-examining recruitment and retention practices will be crucial to maintain the required regulatory functions.

46. A rising workload on regulators under increasing fiscal constraints creates many challenges for delivering the compliance monitoring and enforcement function. Opportunities exist to achieve efficiencies and effectiveness through greater intra- and inter-regulatory system collaboration.

47. Opportunity also exists to improve effectiveness of the System by reviewing current regulation to ensure

these are modernised and that the most effective strategies are selected to achieve the desired outcomes.

48. There are also opportunities to partner and leverage data and technology investments across government (e.g., traceability) and with industry (where appropriate).

c. Increasing role of food systems in sustainability

49. Food systems are seen by some as the single strongest lever to optimize human health and environmental sustainability. However, food is currently threatening both people and planet. An immense challenge facing humanity is to provide a growing world population with healthy diets from sustainable food systems (7).

50. Food production systems are a significant source of greenhouse gas emissions and there are growing expectations and opportunities for mitigation within agrifood systems. The global food system has also been described as the principal driver of accelerating biodiversity loss (8).

51. Reducing food packaging pollution is another example where the food system needs to play its part, though there is a need to be aware of introducing further food safety risks.

Reducing packaging

The Australian National Waste Policy 2018 includes a target for 100 percent of Australian packaging to be recyclable, compostable or reusable by 2025. This target will be actioned by the Australian Packaging Covenant Organisation.

d. Highly interdependent supply chains

52. Complex global supply chains are an increasing concern from a food security perspective and trade and economic perspective (9). COVID-19 disruptions and the Russia – Ukraine conflict have shown the domino effects of unforeseen events in other parts of the world (e.g. sunflower oil shortage).

53. Given the interconnected world we live in, future food issues are unlikely to be foreseeable. This means mechanisms to deal with consequences of world events are required. Lessons need to be learned from the COVID-19 experience to ensure that the critical food infrastructure is protected.

54. For businesses, country reputation is a key 'shared resource' for trade. The need for best practice regulation is more important than ever, as the practices of a minority of producers can adversely affect the rest (10).

New Zealand's Fit for a Better World roadmap has a vision to add $44 billion in export earnings over the next decade building off the strong position of its food and fibre sector.

e. Growing global food demand

55. As strong agricultural economies, Australia and New Zealand are well placed to support the growing global demand for food. The food system will need to play its part in supporting innovation to enable Australians and New Zealanders to develop high quality food offerings. A commitment to delivering best practice regulation, including timely and efficient reviews and regulatory changes are a key to achieving this.

f. Increased age-related consumer vulnerability

56. Our growing populations are living longer. Among the 24.7 million Australians in 2018, one in every six (15.9 percent or 3.9 million people) was aged 65 years and over, increasing from 15.1 percent in 2015 (11). An

59. Foodborne illness is estimated to affect around 200,000 New Zealanders each year. This is in large part attributable to campylobacteriosis, and New Zealand has a Campylobacter Action Plan to reduce foodborne Campylobacter poisoning by 20 percent by 2025 (14).

Australia's Foodborne Illness Strategy 2018-2021+ was launched by Food Ministers in 2018. It aimed to reduce the number of cases per capita (rate) of salmonellosis and campylobacteriosis by 2021.

Trends indicate some success in reducing foodborne salmonellosis rates, despite some significant multi-jurisdictional outbreaks during this period. In 2021, there were approximately 20 percent fewer cases of salmonellosis when compared to the five-year average. The main food sources for salmonellosis remain eggs, poultry and leafy greens.

Changes in foodborne campylobacteriosis rates have not been as favourable despite concerted efforts to work directly with industry on introducing poultry process hygiene criteria. Since 2018, numbers and rates of campylobacteriosis have been trending upwards, with an approximate increase of 10 percent (over the five-year average). The reasons behind this apparent increase are multifactorial and may be influenced by changes in production/supply and surveillance. The continuing high levels of campylobacteriosis indicate the need to pursue more sustained and nationally consistent uptake of the poultry process hygiene criteria, and more educational initiatives to improve food handler behaviour, particularly to address the risks of cross-

ageing population also increases the number of consumers that will be vulnerable to foodborne illness and more prone to morbidity and mortality.

57. There are an estimated 4.1 million cases of foodborne gastroenteritis acquired in Australia each year (12). Foodborne illness incidence, hospitalizations, and deaths were estimated to cost 1.25 billion Australian dollars annually (13).

58. There has been some success in reducing foodborne illness in Australia as part of the Australia's Foodborne Illness Strategy 2018-2021+. However, there is further work to be done.

g. Increasing antimicrobial resistance

60. Antimicrobials are still heavily used not only to protect human and animal health, but also in the broader context of livestock and agricultural production.

61. At least 700,000 human deaths occur each year globally from antimicrobial resistant infections. By 2050, this is projected to increase to 10 million per year if no action is taken (15). It is estimated that in Australia an average of 290 people die each year due to infections with resistant bacteria (16). By 2050, antimicrobial resistance could have an annual impact of 5 to 10 percent on the Australian and New Zealand economies (17).

Australia's National Antimicrobial Resistance Strategy – 2020 and beyond

In March 2020, the Australian Government set a 20-year vision to protect the health of humans, animals and the environment through minimising the development and spread of antimicrobial resistance while continuing to have effective antimicrobials available.

Achieving its vision will require collaboration, and so the strategy seeks to work by means of a *One Health* approach to human health, animal health, agriculture, food and the environment.

Food Standards Australia New Zealand is commencing a two-year surveillance project investigating antimicrobial resistant bacteria in the Australian food.

How much our top six risk factors contribute to health loss across Australia and New Zealand

AU	Attributable health loss (%)	NZ
8.6	Tobacco use	10.1
8.4	Excess weight	8.2
6.5	Blood pressure	7.8
6.3	Dietary risks	7.4
6.1	Blood sugar	5.9
5.1	Alcohol use	4.9

h. Rise of unhealthy food supply

62. Our people are spending less years in good health in large part due to obesogenic food environments. This is straining our health systems and exacerbating inequity (18).

63. Australia and New Zealand share the same top six risk factors for health loss, and the food regulatory system has a role to play in relation to five of these: Excess weight, high blood pressure, dietary risks, high blood sugar and alcohol use.

64. Australian supermarkets stock about 30,000 packaged foods and drinks with many being highly processed and unhealthy. Less than half of all packaged foods available in Australia and New Zealand have been assessed as being healthy, based on nutritional criteria. Research has shown that reducing harmful ingredients in processed and manufactured foods and drinks is one of the most effective nutrition policies to reduce obesity and diet-related diseases (19).

65. Although individual choices play a part, it is now accepted that structural (food supply-based) solutions are needed to make the right choice the easy choice (20).

66. Across the food supply chain there are incentives to ensure food is safe. However, there is a lack of incentive to ensure food is healthy. The Health Star Rating System goes some way in addressing this lack of incentive, but it is voluntary and after five years of operation only 38.6 percent of eligible products in Australia have adopted the scheme (21). Healthier products (3 ½ plus stars) have a higher uptake (22).

Recent Australian Health Strategies

The *Australian National Preventive Health Strategy 2021-2030*, published in December 2021, outlines actions to protect against the avoidable burden of diet-related illness and premature death. It covers improving access to and the consumption of a healthy diet, meaning the food system must play its part.

The *Australian National Obesity Strategy 2022-2032*, launched in March 2022, aims to:

- Halt the rise and reverse the trend in the prevalence of obesity in adults by 2030.
- Reduce overweight and obesity in children and adolescents aged 2-17 years by at least 5 percent by 2030.

A number of actions to achieve these targets focus on food, including building a healthier and more sustainable food system and making processed food healthier.

i. Persistent inequity and food insecurity

67. There is longstanding unequal access to healthy food, with many societal and cultural variables at play. Recent food price inflation is likely to be exacerbating and further entrenching food insecurity and health inequity, making these immediately pressing issues.

68. From a 2015/16 survey in New Zealand, 19 percent of New Zealand children are estimated to live in households experiencing severe-to-moderate food insecurity. Food insecurity more greatly affects Pacific and Māori, with 37 percent of Pacific children and 29 percent of Māori

children growing up in food insecure households (23).

69. In Australia, food security is not measured at a population level regularly or consistently. However, estimates suggest that between 4 percent and 13 percent of the general population are food insecure; and 22 percent to 32 percent of the Indigenous population, depending on location (24). Some groups are more vulnerable to food insecurity, including low-income earners, people who are socially or geographically isolated, Aboriginal and Torres Strait Islander peoples, culturally and linguistically diverse groups, single-parent households, older people and people experiencing homelessness.

70. Nutritional insufficiency is a concern in older adults. One in two aged care residents in Australia is malnourished and incidence is rising (26).

j. E-commerce of food

71. The way we purchase and consume food is changing, even more so since the COVID-19 pandemic. Contact-free delivery has surged in popularity. Health and safety mechanisms built into food regulation over time are largely based on the traditional retail environment.

72. A growing shift to obtain food offerings online will require a re-think of the approach to regulation, both in terms of maintaining consumer confidence in terms of disclosure of food contents, claims about the food, and the safety and suitability of food.

73. The effects of greater consumption of ready to eat, unhealthy foods also need consideration (26).

k. Changes to our information landscape

74. Growth of the virtual world and social media has meant people are subject to a much more diverse range of information sources. Information (and misinformation) overload makes it challenging for consumers to discern what is factually reliable information.

75. Growth in exposure to industry marketing is shaping an unhealthy dietary pattern at population level. Australians, particularly children, are inundated with extremely effective marketing techniques that are used to promote the sale and desire of unhealthy products. During 2016-18 across a variety of Australian media channels, advertising expenditure on sugary drinks (AUD$129.5 million) significantly exceeded expenditure on alternative cold beverages (AUD$68.8 million) (27).

76. Increased connectivity also holds opportunities. Increased experience with QR code scanning during the COVID-19 pandemic and technology advances in product traceability that supports safety provides potential to use technology to provide more expansive information about products in a user-friendly way.

l. Demand for healthy, ethical & sustainable food

77. Globalisation, social and environmental awareness and the information age are increasing consumer expectations.

78. The high rate of growth in demand for healthy and sustainable products could make the food and agribusiness sector more valuable than mining. In Australia the sector currently contributes about AUD$138 billion to the Australian economy, or about 7.6 percent of GDP, compared with 8 percent from mining.

79. Increased information expectations around labelling of food mean food safety and consumer labelling regimes must work more closely together to manage limited food packaging 'real estate'.

m. Expectation of truth in labelling & protection against food fraud

80. Consumers expect that food labels guarantee that the food is what they think it is and that products are as nutritious as we think they are. Labels tell us about ingredients and nutrients.

81. With more and more international trade, it is harder and harder for us to know who our food producers are and exactly where the food comes from. Trustworthy labels must fill this gap.

82. Reputation can be further reinforced using digital verification technologies (e.g. blockchain) to help consumers to have confidence in the credence and other claims associated with their food.

83. Food fraud is an emerging issue. Food fraud or economically motivated adulteration is typically defined as 'the intentional adulteration, substitution, dilution, mixing, or adding of substances or ingredients to food in a manner that falsely describes the food to achieve an economic benefit'. Interactions with the food regulatory system occur when there is food safety risk.

84. Maintaining the Australian and New Zealand food and beverage industries' reputation as producers of high-quality food products is vital to our continued success in being a preferred supplier in

international markets and to maintain consumer confidence.

n. Foods that cut across regulatory interfaces

85. The regulatory landscape is complex. For example, under the current regulatory environment, supplementary sports foods and other similar products available to the Australian public, may contain undeclared ingredients, unapproved novel ingredients and/or substances banned for use in sports (29). These products may also be contaminated or adulterated with substances scheduled by the Therapeutic Goods Administration on the Standard for Uniform Scheduling of Medicines and Poisons (Poisons Standard). Substances on the Poisons Standard are prohibited from food.

86. Food Ministers also remain concerned about the activities of a small number of operators who seek to profit by introducing products into the market by deliberately avoiding or circumventing the food safety provisions that protect consumers (30). An example of this behaviour is labelling products that could be construed as food as "not for human consumption" and marketing them alongside bona-fide food products that meet regulatory requirements.

87. Governments must ensure that there are no gaps in the regulatory landscape.

o. Advances in food production technology

88. Allergenicity of new foods, such as edible insects and addition of novel ingredients to traditional foods is one example of the ongoing need to assess the safety and suitability of food.

89. Between 2012 and 2021 most food recalls were due to undeclared allergens (335 recalls; 43 percent) and microbial contamination (201 recalls; 26 percent). Food recalls for undeclared allergens, microbial contamination, chemical/contaminant and 'other' show an increasing trend (28).

Opportunities for partnership

Allergy & Anaphylaxis Australia have expressed interest in partnering with jurisdictions to improve the way food allergen investigations occur following anaphylactic reactions.

90. A particular challenge is that given the exponential nature of current technological change and innovation, novel foods will need to be assessed at a complexity and rate that is unprecedented. Further, effects that may be cumulative and/or interacting play out over the long-term, so will require evidence to be collected over time.

91. However, the development of products using new technologies offers the opportunity to nudge the food supply by setting new expectations in relation to their composition and how they contribute to our overall food supply.

Part 3. Conclusion

92. The trends discussed in this paper will have a powerful impact on every aspect of our world, defining our collective future. They will create opportunities and challenges and impact the lifestyles, landscapes, communities, and wider society of Australians and New Zealanders and their economy.

93. Our context is ever evolving, and our future will look very different to today. In this context, the System will also need to evolve.

94. Historically, planning has sought to predict future conditions and then manage anticipated demand. Today, we require a different approach. Rather than projecting forward the status quo, our planning should set an ambitious vision for the System and support a System that can adapt to the changing environment, manage risk, and deliver.

95. A System that works towards – rather than against – the current and future needs.

96. The time is right to reconsider how we deliver change. The System needs to adapt its existing networks. This Horizon Scan is the starting point for this process.

97. The role of Horizon Scan is not to identify solutions. Before arriving at solutions, it is important to have a clear understanding of the problems we are seeking to solve.

98. To do this, the Horizon Scan identifies issues, gaps, problems, and untapped potential in the form of Opportunities and Challenges for the System.

99. Many of our stakeholders will already be aware of these trends and have their own mitigation strategies in place.

100. As outlined at the start of the document a key feature of the System is shared accountability, with all stakeholders responsible for the mitigation of risks.

101. We are seeking your feedback on the following questions.

Q1. Are the trends, issues, risks, and opportunities affecting the broader food system accurately captured in the Horizon Scan? If you answered no, which matters have not been captured?

Q2. To what extent are there activities underway within your organisation, to manage these issues and risks and to leverage these opportunities?

Q3. What opportunities do you consider exist for future work or partnerships, for mutual benefit?

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