



Specific PI/ECO (populations, interventions/exposures, comparisons, and outcomes) for high and very high priority questions

VERY HIC	GH PRIORITY FOR EVIDE	NCE REVIEW (To be o	omprehensively addressed via existing or commissioned system resources)	atic reviews, within limits of review				
Dietary pa	Dietary patterns (including whole dietary intake patterns, macronutrient source/quality)							
Question/ Subtopic Dietary	Populations Adult include older adults	Interventions/ exposures, comparisons Dietary patterns vs Other dietary	Outcomes Relevant health outcomes •All-cause mortality	Rationale for priority Evidence base: • Evidence base likely to have				
patterns and health outcomes	 include older adults include adults with risk factors for chronic disease e.g., high blood pressure, overweight /obesity, impaired glucose tolerance, dyslipidaemia exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD 	Other dietary patterns High similarity to a specific dietary pattern vs low similarity to that dietary pattern Dietary patterns must be relevant at a population level e.g., Mediterranean diet (food patterns high in fat sources with high omega 3/PUFA/MUFA); plant-based diets,	 All-cause morbidity <u>Chronic condition risk factors</u> Cancer risk factors Cardiovascular disease risk or related factors Type 2 diabetes risk or related factors Overweight / obesity or related size measures Mental health (depression and anxiety) Reproductive health Gastrointestinal health Iron deficiency anaemia in women of childbearing age <u>Healthy Aging</u> Quality of Life Neurocognitive health including dementia Sarcopenia Bone health 	 Evidence base likely to have substantially changed since 2011 review Evidence gap in previous guidelines (focused primarily on food groups rather than evidence for dietary patterns as a whole) <u>Relevance to Guidelines / Public Health</u> <u>Impact:</u> Dietary patterns approach aligns with how people eat Likely impacts of changing climate and economic factors on dietary patterns <u>Pragmatic considerations:</u> Dietary patterns have been prioritised for review by other international groups, so possible 				
		Exclude interventions/ exposures that are for treatment of disease e.g., diabetes, CVD	 Gestational diabetes risk Pregnancy-related hypertensive disorders risk Pregnancy-related weight gain/postpartum loss Pre/post-natal depression Iron deficiency anaemia <u>Breastfeeding specific outcomes</u> Human milk production <u>Birth outcomes</u> Birth metrics (weight/gestational age at birth/ preterm) Stillbirth/miscarriage <u>Outcomes in the infant/child:</u> Asthma, allergies or allergic syndromes Child growth (including overweight/obesity) Child development (including neurocognitive development) 	 International groups, so possible resource efficiency by using existing reviews for sources of fat high priority included in the dietary patterns e.g., Mediterranean diet 				

Question/ Subtopic	Populations	Interventions/ exposures,	Outcomes	Rationale for priority
Intake of	Children (excluding infants less than 12 months) & adolescents	comparisons Protein intake from	 <u>Child Health outcomes</u> Child growth (including overweight /obesity) Child development (including neurocognitive development) asthma, allergies allergic syndrome mental health iron deficiency anaemia <u>Relevant health outcomes</u> 	Evidence base:
animal vs plant sources of protein and health outcomes	 include older adults include adults with risk factors for chronic disease e.g., high blood pressure, overweight /obesity, impaired glucose tolerance, dyslipidaemia exclude populations exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD 	plant-based sources vs from animal sources high vs low intake of plant foods high vs low intake of animal foods Dairy vs dairy alternatives Exclude interventions/ exposures that are for treatment of disease e.g., diabetes, CVD	 All-cause mortality All-cause morbidity Chronic condition risk factors Cancer risk factors Cardiovascular disease risk or related factors Type 2 diabetes risk or related factors Overweight / obesity or related size measures Mental health (depression and anxiety) Reproductive health Gastrointestinal health Iron deficiency anaemia in women of childbearing age Healthy Aging Quality of Life Neurocognitive health including dementia Sarcopenia Bone health 	 Evidence gap in current guidelines Relevance to Guidelines/ Public Health Impact: Necessary to inform recommendations about dietary patterns and health, in particular around health aspects of sustainable diets Likely impacts of changing climate on dietary patterns Pragmatic considerations: Evaluating macronutrient sources/quality aspects more efficient /feasible than assessing evidence for individual food groups Prioritised for review by other
	<u>Pregnant & breastfeeding</u> <u>Children (excluding</u> <u>infants less than 12</u> <u>months) & adolescents</u>		Maternal health outcomes: Gestational diabetes risk Pregnancy-related hypertensive disorders risk Pregnancy-related weight gain / postpartum loss Pre/post-natal depression iron deficiency anaemia Breastfeeding specific outcomes Human milk production Birth outcomes Birth metrics (weight/gestational age at birth/ preterm) Stillbirth/miscarriage Outcomes in the infant/child: Asthma, allergies or allergic syndromes Child growth (including overweight/obesity) Child development (including neurocognitive development) Child growth (including overweight /obesity) Child development (including neurocognitive development) mental health iron deficiency anaemia	international groups, so possible resource efficiency by using existing reviews.

Ultra-proces	sed foods			
Question/ Subtopic	Populations	Interventions/ exposures, comparisons	Outcomes	Rationale for priority
Ultra- processed food intake and health outcomes	Adult • include older adults • include adults with risk factors for chronic disease e.g., high blood pressure, overweight /obesity, impaired glucose tolerance, dyslipidaemia • exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD Pregnant & breastfeeding Children (excluding infants less than 12 months) & adolescents	High intake of ultra- processed foods vs No/low intake of ultra-processed foods Exclude interventions/ exposures that are for treatment of disease e.g., diabetes, CVD	Relevant health outcomes All-cause morbidity All-cause morbidity Chronic condition risk factors Cancer risk factors Cardiovascular disease risk or related factors Type 2 diabetes risk or related factors Overweight / obesity or related size measures Mental health (depression and anxiety) Reproductive health Gastrointestinal health Iron deficiency anaemia in women of childbearing age Healthv Aging Quality of Life Neurocognitive health including dementia Sarcopenia Bone health Maternal health outcomes: Gestational diabetes risk Pregnancy-related hypertensive disorders risk Pregnancy-related weight gain / postpartum loss Pre/post-natal depression Iron deficiency anaemia Breastfeeding specific outcomes Human milk production Birth metrics (weight/gestational age at birth/ preterm) Stillbirth/miscarriage Outcomes in the infant/child: Asthma, allergies or allergic syndromes Child development (including neurocognitive development) Child development (including neurocognitive development) <td> Evidence base: Likely to be new evidence to warrant a review of ultra-processed foods (as distinct from discretionary foods). Evidence gap in previous guidelines Relevance to Guidelines / Public Health Impact: Significant increase in availability of non-core foods and population diet includes many such foods. Intake of non-core foods displaces core foods from diet and has a likely impact on chronic disease Pragmatic considerations: A focus on ultra-processed foods (and drinks) encompasses several priority issues, including highly processed meat / meat alternatives, use of fruit juice use as sweetener in processed foods, sugar-sweetened/ artificially sweetened beverages. This approach also supports the focus on dietary patterns rather than specific food groups. Dental health (high prevalence - not high DALY, common risk factors with other chronic conditions, relevant for specific population/exposure e.g., sugar, sugar sweetened beverages) Some, but not all, discretionary foods will be captured by this approach. Ultra-processed food and health outcomes prioritised for review by other international groups, so possible resource efficiency by using existing reviews, where relevant. </td>	 Evidence base: Likely to be new evidence to warrant a review of ultra-processed foods (as distinct from discretionary foods). Evidence gap in previous guidelines Relevance to Guidelines / Public Health Impact: Significant increase in availability of non-core foods and population diet includes many such foods. Intake of non-core foods displaces core foods from diet and has a likely impact on chronic disease Pragmatic considerations: A focus on ultra-processed foods (and drinks) encompasses several priority issues, including highly processed meat / meat alternatives, use of fruit juice use as sweetener in processed foods, sugar-sweetened/ artificially sweetened beverages. This approach also supports the focus on dietary patterns rather than specific food groups. Dental health (high prevalence - not high DALY, common risk factors with other chronic conditions, relevant for specific population/exposure e.g., sugar, sugar sweetened beverages) Some, but not all, discretionary foods will be captured by this approach. Ultra-processed food and health outcomes prioritised for review by other international groups, so possible resource efficiency by using existing reviews, where relevant.

Sustainable di	ets			
Question/ Subtopic	Populations	Interventions/ exposures, comparisons	Outcomes	Rationale for priority
Dietary patterns/food intakes and sustainability outcomes	Identified as a ver To be addressed v (concurrent) proc specialist expertise	via a separate ess due to breadth of	 Evidence base: Evidence base is likely to have changed significantly since 2013 Evidence gaps in previous guidelines Relevance to Guidelines / Public Health Impact: Increasing population interest in eating sustainably and the health impact Poor planetary health has direct effects on human health Climate impacts that may alter availability of particular foods (scarcity, prmaking recommendations) Pragmatic considerations: ? Need to consider not only health / sustainability aspects but also the loc can be done via evidence-to-decision process) Identified as a priority to be addressed via a separate (concurrent) proces required Prioritised for review by other international groups. Potential for some efficient context, where suitable and within resources. Scoping review may be suitable methodology 	icing) should be considered when cal social and economic context (this ss due to breadth of specialist expertise

HIGH	HIGH PRIORITY FOR EVIDENCE REVIEW (Aim to address comprehensively via existing or commissioned systematic reviews, within limits of review resources)						
Meal patter	Meal patterns (eating behaviour) - Frequency of eating occasions						
Question/ Subtopic	Populations	Interventions/ exposures, comparisons	Outcomes	Rationale for priority			
Frequency of eating and health outcomes	Adult • include older adults with risk factors for chronic disease e.g., high blood pressure, overweight /obesity, impaired glucose tolerance, dyslipidaemia • exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD Pregnant & breastfeeding Children (excluding infants less than 12 months) & adolescents	Frequency of eating vs Different meal pattern frequency Varying levels of frequency of eating different meals patterns Exclude interventions/ exposures that are for treatment of disease e.g., diabetes, CVD	Relevant health outcomes All-cause mortality All-cause morbidity Chronic condition risk factors Cancer risk factors Cardiovascular disease risk or related factors Type 2 diabetes risk or related factors Overweight / obesity or related size measures Mental health (depression and anxiety) Reproductive health Gastrointestinal health Iron deficiency anaemia in women of childbearing age Health Aging Quality of Life Neurocognitive health including dementia Sarcopenia Bone health Maternal health outcomes: Gestational diabetes risk Pregnancy-related hypertensive disorders risk Pre/post-natal depression Iron deficiency anaemia Breastfeeding specific outcomes Human milk production Birth metrics (weight/gestational age at birth/ preterm) Stillbirth/miscarriage Outcomes in the infant/child: Asthma, allergies or allergic syndromes Child development (including overweight/obesity) Child development (including neurocognitive development) Child development (including neurocognitive development) <td> Evidence base: Unclear if existing evidence will be sufficient to guide new recommendations Current evidence base limited (relates primarily to breakfast consumption) and would benefit from review Relevance to Guidelines/ Public Health Impact: Understanding eating behaviour is at the core of the Guidelines, to support development of recommendations, implementation and improve health outcomes Understanding antecedents to eating behaviours enables interventions to be devised Department of Health commissioned Rapid Review of Australia's Food Culture (2020) identified addressing eating behaviour as a priority to inform revised guidelines Pragmatic considerations: Frequency of eating prioritised for review by other international groups, so possibility of using existing reviews. </td>	 Evidence base: Unclear if existing evidence will be sufficient to guide new recommendations Current evidence base limited (relates primarily to breakfast consumption) and would benefit from review Relevance to Guidelines/ Public Health Impact: Understanding eating behaviour is at the core of the Guidelines, to support development of recommendations, implementation and improve health outcomes Understanding antecedents to eating behaviours enables interventions to be devised Department of Health commissioned Rapid Review of Australia's Food Culture (2020) identified addressing eating behaviour as a priority to inform revised guidelines Pragmatic considerations: Frequency of eating prioritised for review by other international groups, so possibility of using existing reviews. 			

Meats, pou	Meats, poultry, fish, eggs, nuts and seeds, legumes/beans (including pulses and tofu)					
Question/ Subtopic	Populations	Interventions/ exposures, comparisons	Outcomes	Rationale for priority		
Type of meat intake (red vs white) and health outcomes	Adult • include older adults with risk factors for chronic disease e.g., high blood pressure, overweight /obesity, impaired glucose tolerance, dyslipidaemia • exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD Pregnant & breastfeeding Pregnant & breastfeeding Children (excluding infants less than 12 months) & adolescents	Red meat intake versus white meat Exclude interventions/ exposures that are for treatment of disease e.g., diabetes, CVD	Relevant health outcomes All-cause mortality (life expectancy is an inverse measure of early mortality) All-cause morbidity Chronic condition risk factors Cancer risk factors Cardiovascular disease risk or related factors Type 2 diabetes risk or related factors Overweight and obesity or related size measures Mental health (depression and anxiety) Reproductive health Gastrointestinal health Iron deficiency anaemia in women of childbearing age Healthy Aging Quality of Life Neurocognitive health including dementia Sarcopenia Bone health Maternal health outcomes: Gestational diabetes risk Pregnancy-related weight gain / postpartum loss Pre/post-natal depression iron deficiency anaemia Breastfeeding specific outcomes Human milk production Birth metrics (weight/gestational age at birth/ preterm) Stillbirth/miscarriage Outcomes in the infant/child: Astma, allergies or allergic syndromes Child development (including overweight/obesity) Child development (including neurocognitive development)	 Evidence base Evidence base likely to have changed, including evidence on: health outcomes (overall mortality, substitution with white meat) sustainability aspects. Evidence gaps/uncertainty in current guidelines could be addressed with an update <u>Relevance to Guidelines:</u> Red Meat forms a large proportion of the Australian diet <u>Public Health Impact / Context:</u> Production and consumption of red meat is related to economic and environment factors, and burden of disease. Red meat is a good source of protein and iron. Pragmatic considerations: Focus on red meat vs white meat will provide supportive evidence to very high priority questions about animal vs plant protein sources (see above) Red vs white meat substitution prioritised for review by other international groups, so possible resource efficiency by using existing reviews. High rather than very high priority owing to coverage of this topic by 'very high' priority questions on 'animal vs plant protein sources' 		
Legume/ pulse intake and	Adult • include older adults	High intake of legumes/ pulses vs No/	 <u>Relevant health outcomes</u> All-cause mortality (life expectancy is an inverse measure of early mortality) 	Priority:		

Question/ Subtopic	Populations	Interventions/ exposures, comparisons	Outcomes	Rationale for priority
health outcomes	 include adults with risk factors for chronic disease e.g., high blood pressure, overweight /obesity, impaired glucose tolerance, dyslipidaemia exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD 	low intake of legumes/ pulses Exclude interventions/ exposures that are for treatment of disease eg diabetes, CVD	 All-cause morbidity <u>Chronic condition risk factors</u> Cancer risk factors Cardiovascular disease risk or related factors Type 2 diabetes risk or related factors Overweight and obesity or related size measures Mental health (depression and anxiety) Reproductive health Gastrointestinal health Iron deficiency anaemia in women of childbearing age <u>Healthy Aging</u> Quality of Life Neurocognitive health including dementia Sarcopenia Bone health Maternal health outcomes: Gestational diabetes risk Pregnancy-related hypertensive disorders risk Pregnancy-related hypertensive disorders risk Prepost-natal depression Iron deficiency anaemia Breastfeeding specific outcomes Human milk production Birth metrics (weight/gestational age at birth/ preterm) Stillbirth/miscarriage Outcomes in the infant/child: Asthma, allergies or allergic syndromes Child growth (including overweight/obesity) Child Health outcomes Child development (including neurocognitive development) 	 Evidence base Evidence base for adults unlikely to have changed significantly Evidence base could benefit from strengthening in view of likely increased shift towards plant-based protein sources, in particular intakes in children <u>Relevance to Guidelines / Public</u> <u>Health Impact:</u> Diets low in legumes was the leading dietary risk contributing to 1.2% of the total burden of disease in Australia in 2018. Legumes important substitute for meat (noting high burden of disease associated with red meat intake) Significant increase in consumption of meat substitutes in recent years <u>Pragmatic/other context:</u> Legume intake and health outcomes prioritised for review by other international groups, so possible resource efficiency by using existing reviews.
			 Asthma, allergies allergic syndrome Mental health Iron deficiency anaemia 	

Contextual f	actors, barriers, enablers and interventions			
Question/ Subtopic	Populations	Interventions/ exposures, comparisons	Outcomes	Rationale for priority
Influence of eating environment/ context and consumption aligned with guidelines Barriers and	 All (adults, older adults pregnant & breastfeeding, children & adolescents) exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD Subpopulations of interest: Priority populations National Preventive Health Strategy 2021 -2030 Aboriginal and Torres Strait Islander people Culturally and linguistically diverse (CALD) Lesbian, gay, bisexual, transgender, queer or questioning, intersex and/or other sexuality and gender diverse people (LGBTQI+) people with mental illness people with disability rural, regional and remote 	Factors relating to eating environment/ context, including: - home-based factors (e.g., family meals, use of technology during mealtimes) - factors relating to other environments (e.g., school, workplace, community) Exclude interventions/ exposures that are for treatment of disease e.g., diabetes, CVD Other barriers and	Consumption aligned with guidelines (at point in time; life course)	 Evidence base: Evidence gap - social factors influencing food and food choice have changed since 2013 and this may have generated new evidence Relevance to Guidelines / Public Health Impact: Understanding structural constraints will support guideline development and implementation Underpins eating behaviour and food choices, and critical to addressing current lack of compliance with guidelines Key contextual factors that underpin nutrition across the life course Pragmatic considerations: Social changes since 2013 including increased availability/consumption of meals of convenience, uber eats, processed foods aimed at children Focus is on key barriers / enablers relevant to scope of guidelines / recommendations (i.e., questions about when, where, why and how people should eat, to support recommendations about healthy eating behaviours alongside information about 'what' to eat). Questions about implementation (e.g., how to improve dietary choices/behaviours should be addressed separately).
enablers to consumption aligned with guidelines	 <u>All (adults, older adults pregnant & breastfeeding, children & adolescents)</u> exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD <u>Subpopulations of interest:</u> Priority populations National Preventive Health Strategy 2021 -2030 Aboriginal and Torres Strait Islander people Culturally and linguistically diverse (CALD) Lesbian, gay, bisexual, transgender, queer or questioning, intersex and/or other sexuality and gender diverse people (LGBTQI+) people with mental illness people with disability rural, regional and remote 	enablers to consumption of foods aligned with guidelines e.g., food literacy/skills Exclude interventions/ exposures that are for treatment of disease e.g., diabetes, CVD	aligned with guidelines (at point in time; life course)	 Evidence base: Evidence gap - social factors influencing food and food choice have changed since 2013 and this may have generated new evidence Relevance to Guidelines / Public Health Impact: Understanding structural constraints will support guideline development and implementation Underpins eating behaviour and food choices, and critical to addressing current lack of compliance with guidelines Key contextual factors that underpin nutrition across the life course Pragmatic considerations: Social changes since 2013 including increased availability/consumption of meals of convenience, uber eats, processed foods aimed at children Focus is on key barriers / enablers relevant to scope of guidelines/recommendations (i.e., questions about when, where, why and how people should eat, to support recommendations about healthy eating behaviours alongside information about 'what' to eat). Questions about implementation (e.g., how to improve dietary choices/behaviours should be addressed separately).
Barriers and enablers to consumption aligned with guidelines	All (adults, older adults pregnant & breastfeeding, children & adolescents) exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD	Food security Exclude interventions/ exposures that are	Consumption aligned with guidelines (at point in time; life course)	 <u>Evidence base:</u> Evidence gap - social factors influencing food and food choice have changed since 2013 and this may have generated new evidence

Question/	Populations	Interventions/	Outcomes	Rationale for priority
Subtopic		exposures,		
	 <u>Subpopulations of interest:</u> Priority populations National Preventive Health Strategy 2021 -2030 Aboriginal and Torres Strait Islander people Culturally and linguistically diverse (CALD) Lesbian, gay, bisexual, transgender, queer or questioning, intersex and/or other sexuality and gender diverse people (LGBTQI+) people with mental illness people of low socioeconomic status people with disability rural, regional and remote 	comparisons for treatment of disease e.g., diabetes, CVD		 <u>Relevance to Guidelines / Public Health Impact:</u> Understanding structural constraints will support guideline development and implementation Underpins eating behaviour and food choices, and critical to addressing current lack of compliance with guidelines Key contextual factors that underpin nutrition across the life course Pragmatic considerations: Social changes since 2013 including increased availability/consumption of meals of convenience, uber eats, processed foods aimed at children Focus is on key barriers / enablers relevant to scope of guidelines / recommendations (i.e., questions about when, where, why and how people should eat, to support recommendations about healthy eating behaviours alongside information about 'what' to eat). Questions about implementation (e.g., how to improve dietary choices/behaviours should be addressed separately).
Interventions /strategies to improve dietary patterns and eating behaviours aligned with the guidelines across the life course	 All (adults; children & adolescents; pregnancy & breastfeeding) exclude populations exclusively selected on the basis of disease e.g., diabetes, CVD <u>Subpopulations of interest:</u> Priority populations National Preventive Health Strategy 2021 -2030 Aboriginal and Torres Strait Islander people Culturally and linguistically diverse (CALD) Lesbian, gay, bisexual, transgender, queer or questioning, intersex and/or other sexuality and gender diverse people (LGBTQI+) people with mental illness people with disability rural, regional and remote 	Interventions Exclude interventions/ exposures that are for treatment of disease e.g., diabetes, CVD	Consumption aligned with guidelines (at point in time; life course)	 Evidence base: ? Evidence gap - some evidence for interventions underpinning current guidelines, however could be strengthened in view of lack of compliance with guidelines. Relevance to Guidelines / Public Health Impact: Understanding the structural issues underpinning eating behaviour and food choice will support implementation - critical to addressing current lack of compliance with guidelines Understanding required to address significant health inequities that exist, with those in lower socioeconomic areas having poorer quality of food and nutrient intake compared with those in the highest. Pragmatic considerations: Food-based interventions for diet quality prioritised for review by other international groups, so possible resource efficiency by using existing reviews, where relevant. Identified as a high priority. To be addressed separately (relates primarily to implementation). Socio ecological framework interventions at individual, community, population, policy etc scoping review, focusing on the Australian context, might be an appropriate method

PRIORITY TOPICS ADDRESSED VIA SEPARATE PROCESS OR ALTERNATIVE SOURCE/AVENUE							
Question/ Subtopic	Populations	Interventions/ exposures, comparisons	Outcomes	Rationale for priority			
Dietary patterns / food intakes and sustainability outcomes	Identified as a priority To be addressed via a separate (concurrent)	Identified as a priority. To be addressed via a separa to breadth of specialist expe		See above			
Barriers and enablers to diets consistent with the guidelines Strategies to improve diet quality and/or support	process due to breadth of specialist expertise required.	Requirements to inform impl resources to be considered s	See above				
diets consistent with the guidelines Guideline translation and implementation tools / methods for developing National food selection guides							

Topics to be addressed using existing evidence sources / National Reports							
Question/ Subtopic	Populations	Interventions/ exposures, comparisons	Outcomes	Rationale for priority			
Sodium / salt intake and health outcomes	,	ake and health outcomes to be addressed based /s / recommendations (NRVs 2017 and current u	5				
Alcohol intake and health outcomes		Alcohol intake and health outcomes to be addressed based on existing NHMRC evidence reviews / recommendations (NHMRC Alcohol Guidelines 2020)					
Food processing, preparation or cooking method/s and	Food safety asp	Food safety aspects to be addressed based on existing National food safety advice, e.g.,					
food safety outcomes	,	Food Safety Information Council					
Physical activity levels and life course consumption aligned with guidelines	Physical activity aspects to be addressed based on National Physical Activity Guidelines						
Physical activity levels and nutrition/ health outcomes							
Infant feeding (ever/never breastfeeding,							
breastfeeding duration and frequency, infant formula	in scope of this						
intake, complementary foods) and health outcomes							