

Document title	The Northern Territory Food Business Risk Classification Framework
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Acronyms	Full form
NT	Northern Territory
NTG	Northern Territory Government
DoH	Department of Health
PHD	Public Health Directorate

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1. Overview

The Food Regulation Standing Committee (FRSC) and later the Australian Government Productivity Commission endorsed a national risk profiling tool, the Risk Profiling Framework (the Framework). The Framework is located on the Food Regulation Website at:

http://www.health.gov.au/internet/fr/publishing.nsf/Content/risk-profiling-framework.

The Framework is a series of decision trees, with supporting documentation to assist its use. The approach in the decision tree is to consider the nature of the potential risk from products sold by the business sector and considering both the inherent risk (i.e. in the absence of existing controls) and the reliability of existing risk management actions i.e. managed risk, and whether there are steps that are susceptible to introduction of hazards, or processes that are critical to the safety of the product at the time it is consumed.

The result from using the Framework is a classification of food businesses or industry sectors into one of four classifications, from the highest risk category of Priority 1 (P1) through P2 and P3 to the lowest risk category of P4.

Priority 1 Priority 2

This classification relates to business sectors that will, characteristically handle foods that support the growth of pathogenic micro-organisms and where such pathogens are present, or could, from experience or literature reports, be expected to be present. Their handling of food will characteristically, also include at least one step at which control actions must be implemented to ensure the safety of the food. Priority 1 business sectors are further characterised by known risk-increasing factors, such as potential for inadequate/incorrect temperature control (e.g. reheating or hot holding foods), a consumer base that includes predominantly immunocompromised populations, the scale of production/service and other factors as identified in the National Risk Validation Project (FSA & ME 2002).

Priority 3

This classification relates to business sectors that will only handle medium risk or low risk foods. A medium risk food is one that may contain harmful natural toxins or chemicals introduced at steps earlier in the food supply chain or that - may contain pathogenic micro-organisms but will not normally support the formations of toxins or growth due to food type or processing but may support the formation of toxins or growth of pathogenic micro-organisms.

Priority 4

Business sectors that will normally handle only low risk foods, i.e. those that are unlikely to contain pathogenic organism and will not support their growth, and will not introduce microbial, physical or chemical hazards to the foods they sell or handle.

2. Definitions

Term	Definition
Catering event	Involves the provision of food, under an agreement where the food is predetermined in type and quantity, for a predetermined group of persons, and served at a predetermined date and time.
Cold -holding	Previously prepared ready-to-eat food, stored cold \leq 5°C.
Cook-chill	 A catering process whereby meals or meal components are fully cooked then cooled by controlled chilling (e.g. blast chilling) and subsequently stored at a temperature above freezing point (e.g. 3°C) prior to regeneration and/or service. The meals are expected to be reheated prior to consumption. These foods are not sterile and their safety is based on a combination of: a minimal heat treatment (usually at 70 – 75°C) intended to minimise loss of sensory and nutritional quality product information refrigerated storage limited shelf-life packaging systems (e.g. vacuum or modified atmosphere packaging); and the intrinsic properties of the foods (such as reduced pH or water
Food husing on	
	 hereigness, enterprise of activity (other than primary rood production) that involves: the handling of food intended for sale; or the selling of food. This is regardless of whether the business, enterprise or activity concerned is of a commercial, charitable or community nature or whether it involves handling or selling food on one occasion only.
Food premises	Includes land (whether or not vacant), the whole or any part of a building, tent, stall or other structure (whether of a permanent nature or temporary nature), a pontoon and a vehicle (other than a food transport vehicle that is engaged in the transport of food).
Food service business	Businesses that make and/or serve food for consumption on site, taken away for immediate consumption, or at a catering event (may include transport).
FSM Category	This refers to the Food Safety Management Category of the business under FSANZ Food Standard 3.2.2A – Food Safety Management Tools. This category determines what food safety management tools need to be implemented by the business to manage the risk associated with food handling practices.
Handling	In relation to food, including making, manufacturing, producing, collecting, extracting, processing storing, transporting, delivering, preparing, treating, preserving, packing, cooking, serving and displaying food.
High risk foods	Foods that may contain pathogenic micro-organisms and will support formation of toxins or growth of pathogenic micro-organisms.
Hot-holding	Previously cooked ready-to-eat food, stored hot \geq 60°C.

Term	Definition
Inherent risk	Relates to the possibility for a food to contain a hazard that could be present at levels that could cause human illness whether due to the nature of the food itself, or the processing and handling it undergoes.
Low risk foods	Those foods that are unlikely to contain pathogenic organisms and will not support their growth, and will not introduce microbial, physical or chemical hazards to the foods they sell or handle.
Medium risk foods	Food that may contain harmful natural toxins or chemicals introduced at steps earlier in the food supply chain, or that: may contain pathogenic micro- organisms but will not normally support the formation of toxins or the growth of pathogens due to food characteristics; or are unlikely to contain pathogenic micro-organisms due to food type or processing but may support the formation of toxins or growth of pathogenic micro-organisms.
Perishable	Foods that allow microbial growth and so will eventually deteriorate and spoil. Typically such foods require storage under refrigeration to extend shelf life, i.e. foods that are not shelf stable or are potentially hazardous.
Potentially hazardous foods	 These are foods that meet both of the criteria below: they might contain the types of food-poisoning bacteria that need to multiply to large numbers to cause food poisoning; and the food will allow the food-poisoning bacteria to multiply. Potentially hazardous food has to be kept at certain temperatures to minimise the growth of any pathogenic micro-organisms that might be present in the food or to prevent the formation of toxins in the food.
Processing	Means activity conducted to prepare food for sale including cooking, drying, fermenting, pasteurising, preserving and washing, or a combination of these activities.
Processor/manufacturer	Businesses engaged in the physical or chemical transformation of food, food ingredients, substances or components into new products. Can be sold via wholesaler or direct to business, can include minimal or widespread distribution.
Ready-to-eat food (RTE)	Food that is normally consumed in the same state as that in which it is sold (without further cooking or preparation) but does not include nuts in the shell and whole, raw, fruits and vegetables that are intended for hulling, processing, peeling or washing by the consumer.
Retail business	Businesses that sell food to the public which is not processed on site (can include slicing and weighing of delicatessen products and reheating/hot holding of RTE cooked foods).
	supermarkets, convenience stores or specialty retail stores (e.g. bakery, butcher).
Small producer	A business that employs less than 50 people in the "manufacturing" sector or which employs less than 10 people in the "food services" sector.
Transporter	Businesses engaged in transport or pre-retail distribution activities (particularly importation, wholesaling, wholesale storage and multipurpose wholesalers who distribute not only to retailers but also to restaurants or consumers).

3. Determining the risk classification

Determine the types of food and processes

- 1) What are the types of food provided by the business?
 - a. List all the food products of the business to assist in classifying the type of the business
- 2) What types of processes are used by this business?
 - a. List all the food processes used by the food business to assist in classifying the type of business
- 3) What is the highest risk food of the business?
 - a. The highest risk food/process of the food business determines the risk classification

Determine the business sector

- 4) What is the business sector or business sectors that apply to the food business?
 - a. Retail
 - b. Food service
 - c. Processor / Manufacturer
 - d. Transporter

Assign the risk classification

- 5) Look at the tables of food risk classification provided.
- 6) For the sector determined, assign the highest risk food process.
- 7) If the food business operates across more than one business sector, then the sector that has the highest risk determines the classification from the highest risk category of Priority 1 (P1) through P2, P3 to the lowest risk category of P4.
- 8) For a food business that is a processor/manufacturer, the size of the processor/manufacturer is also used to determine the risk classification in some categories (as indicated in the tables).

Change of risk classification

9) Risk classification is set and remains unchanged unless the type of food or processes or business sector changes – it does NOT change based on performance.

4. Risk classification – Retail

Food for retail sale – food for sale to the public which is not processed on site (can include slicing and weighing of delicatessen products and reheating/hot holding of RTE cooked foods).

Generally not intended to be consumed on site and can include supermarkets, convenience stores or speciality retail stores e.g. bakery, butcher.

Food	Description	Examples	Risk Hazard	Comments	FSM Category
Alcoholic beverages Packaged	Outlets selling alcohol to the public for consumption off the premises.	 Packaged or bottled beer, wine or spirits Bottle shop 	P4 Chemical	Products are usually pre- packaged.	N/A
Bakery products	Retailer of bread and baked goods. Not manufacturing. Does not include bakery products that contain perishable fillings (P2).	 Bakery products that may contain non-perishable fillings (e.g. jam) Bread Biscuits Cakes 	P3 Microbial	May contain pathogenic microorganisms but will not normally support the formation of toxins or growth of pathogenic microorganisms due to food characteristics.	N/A
Bakery products Perishable fillings	Baked goods that contain perishable fillings that are not manufactured on the premises but can include reheating. If manufactured on premises the classification becomes P1. See manufacturer category.	 Fresh cream filled cakes Custard filled pastries Meat pies Sausage rolls Egg-based fillings Egg glazes 	P2 Microbial	Classified P2 on the basis that the retail outlet does not significantly contribute to the safety of the product. Perishable fillings may encourage pathogenic growth.	If the ready-to-eat food is handled unpackaged Category 2. If the food is packaged N/A.
Continental type delicatessen food	Retailer of products which are high risk, processed (heat or non-heat treated), ready-to-eat, requiring refrigeration or reheating. Can include portioning, slicing and weighing.	 Antipasto Caviar Cheese Cured meats Fermented products Pâté Smoked or pickled products Small goods 	P2 Microbial	Many of the foods sold in a delicatessen require refrigeration for control of microbial growth. Prevention of recontamination is critical to the safety of the product sold by the business.	If the ready-to-eat food is handled unpackaged Category 2. If the food is packaged N/A.

Food	Description	Examples	Risk Hazard	Comments	FSM Category
High risk food Perishable	Business that sells, but have not prepared high risk foods. Ready-to- eat, refrigerated storage or reheated / hot-held for sale. Generally packaged.	 Supermarkets that are not processing food Sandwiches Fresh cut fruit and vegetables Pastries containing meat or egg 	P2 Microbial	Many of the foods require refrigeration for control of microbial growth. Prevention of recontamination is critical to the safety of the product sold by the business.	If the ready-to-eat food is handled unpackaged Category 2. If the food is packaged N/A.
Low risk food unpackaged	Business sells only low risk foods that are unpackaged, may include repacking bulk ingredients into smaller units for sale.	 Bar serving alcohol Wine tasting Repacking dry ingredients from bulk (e.g. spices, grains, nuts, tea, flour) 	P3 Microbial	Low risk foods only. Potential for physical, chemical or microbial contamination.	N/A
Low risk packaged foods	Business sells only low risk, shelf-stable, pre- packed foods.	 Newsagent Chemist Vending machine Potato chips Soft drinks Confectionery (packaged) 	P4 Microbial Chemical	Low risk foods only, packaging provides protection against recontamination.	N/A
Medium risk food	Business sells medium risk foods, ready-to- eat, refrigerated storage, generally packaged.	 Hard-frozen ice-cream Milk based confectionery Yoghurt Fresh whole fruit and vegetables Single cut fruit and vegetables Pasteurised milk Dried fruit and nuts Health food shops Bed and breakfast (providing low-medium risk breakfast supplies only) 	P3 Microbial	May contain pathogenic microorganisms but will not normally support the formation of toxins or growth of pathogenic microorganisms due to food characteristics.	N/A
Raw meat and poultry	High risk processed raw meat and poultry, no heat treatment, refrigerated, not intended to be eaten raw.	 Beef Lamb Pork Fresh poultry Retail only butcher 	P2 Microbial	Classified P2 on the basis that the retail outlet does not contribute significantly to the safety of the product.	N/A – not selling ready-to-eat food.

Food	Description	Examples	Risk Hazard	Comments	FSM Category
Seafood Excludes processing of bivalve molluscs	High risk processed (raw and heat treated) fish and seafood, refrigerated or frozen storage. Processing of bivalve molluscs onsite becomes P1 (See manufacturer – shell fish processor)	 Crustaceans Fish Mollusc retailing (including already processed) Seafood, fresh or frozen 	P2 Microbial	Classified P2 on the basis that the retail outlet does not contribute significantly to the safety of the product.	If the ready-to-eat food is handled unpackaged Category 2. If the food is packaged N/A.

5. Risk classification – Food service

Businesses that make and/or serve food for consumption on site, taken away for immediate consumption or at a catering event (may include transport).

Food	Description	Examples	Risk Hazard	Comments	FSM Category
Catering Offsite activity	High risk processed, pre-prepared ready-to- eat food (possible cooling), transported to another location, refrigerated storage, reheating or hot- holding before serving.	 Airline, rail, sea transport Motor racing Spit roast caterer Tour operator 	P1 Microbial	For large catering operations, exposure is relevant.	Category 1
Catering Onsite activity	High risk processed, pre-prepared ready-to- eat food. Possible cooling, refrigerated storage, reheating or hot-holding.	 Vulnerable population facilities Sporting and major events Correctional facilities Function centre 	P1 Microbial	Vulnerable population businesses required to comply with Standard 3.3.1 of the Australia and New Zealand Food Standards Code.	Category 1
Medium risk foods Perishable	Business that make / serves medium risk foods. Refrigerated storage, ready-to-eat.	 Ice-cream vans Popcorn / fairy floss makers Coffee vans Bubble tea Cocktail bar 	P3 Microbial Chemical Physical	May contain pathogenic microorganisms but will not normally support the formation of toxins or growth of pathogenic microorganisms due to food characteristics.	N/A
Restaurant and takeaway Ready-to-eat food prepared in advance >4 hours	High risk food processed onsite from raw (e.g. cooking), time delay before serving (cooling, hot or cold- holding). Raw preparation allows for cross-contamination risks to be increased. Food can be consumed on the premises, taken away by the customer or delivered.	 Bar Café Clubs Restaurant Mobile food operator Market stall Sushi Raw egg sauces Laksa Charcoal chicken Supermarket hot chicken Soft serve ice- cream (no in situ pasteuriser) 	P1 Microbial	History of outbreaks where meals are prepared in advance (e.g. <i>Salmonella</i> and <i>Campylobacter</i>). Hot-holding or poor cooling of foods supporting spore forming pathogen growth identified as a common cause of food-borne disease outbreaks.	Category 1

Food	Description	Examples	Risk Hazard	Comments	FSM Category
Restaurant and takeaways Ready-to-eat food express order <4 hours	High risk food, processed from raw, direct cook / serve or make / serve operation, intended for immediate consumption. Food can be consumed on the premises, taken away by the customer or delivered.	 Fast food Juice bar Mobile food operator Soft serve ice- cream (in situ pasteuriser) 	P2 Microbial	High risk foods but no hot-holding and no simultaneous servings. Cross- contamination risks still exist from raw preparation onsite.	Category 1
Restaurant and takeaway Ready-to-eat food no raw preparation	High risk food, purchased pre- prepared / cooked. Can be held cold or hot for sale and/or consumption. Food intended to be consumed in short time frame.	 Hot dogs/dim sims Sandwiches 	P2 Microbial	Could also be covered under P2 retailer of high risk foods if no option to consume onsite.	Category 2

6. Risk classification – Processor/Manufacturer

Engaged in the physical or chemical transformation of food, food ingredients, substances or components into new products. Can be sold via wholesaler, direct to business or direct to the public. Can include minimal or widespread distribution.

Food	Description	Examples	Risk Hazard	Comments
Bakery products Perishable fillings processing	Applies to baked goods that contain high risk fillings. Includes fresh and frozen products. For bakery items (non-perishable) see cereal processing.	 Cake or pastry Pie / pasty (including meat, fruit or vegetable) Quiche Some ganaches (depends on water activity) 	P1 Microbial	Product requires refrigerated or frozen storage to minimise pathogen growth that remain in the product or a component of the product, and to prevent the formation of toxins.
Beverage processing	Applies to the processing operations of beverages including alcoholic, carbonated and bottled water. Applies to ice making. Does not include manufacturing of milk and milk products or fruit and vegetable juices.	 Beer Wine Spirits Soft drinks Cordial Packaged water Tonic water Tonic water Wine vinegar Kombucha Ice making 	P3 Microbial Chemical Physical	Carbonated beverage processing and acidity means pathogens are unlikely to be present or to grow. For alcoholic beverages chemicals that cause acute illness (methanol) are unlikely. Physical contamination is the greatest risk associated with ice making as frozen water does not support microbial growth.
Beverage processing Small producer	Applying to small businesses producing fermented beverages.	 Kombucha Water-based and nut- based kefirs Rejuvelac Kvass Fermented sodas 	P3 Chemical	Acidity means pathogens unlikely to grow - if pH is too low injury may occur to the oesophagus. Uncontrolled fermentation or secondary fermentation may increase alcohol in breach of the Food Standards Code and other legislation.
Canned food processing	Preparing food (including processing) by heat in an appropriate manner before or after hermetically sealing the food in a container to prevent spoiling. The commercial sterilisation of fish, meats, fruits and vegetables, soups and sauces, in metal or glass containers or retort pouches. Includes baby food in jars.	 Cans Bottles Sterile retort pouches Pasta in jars Baby food in jars Canned egg custard All low acid foods (pH >4.5) 	P2 Microbial	Canned foods are usually heat treated to be stored indefinitely at ambient temperature. The heat process is dependent on the pH of the food. Unopened, heat treated canned foods are not potentially hazardous.

Food	Description	Examples	Risk Hazard	Comments
Canned food processing Very small producer and high acid food	Very small producer of high acid product. The size and type of food may be used to alter the risk classification.	 Few kilograms per week of canned tomatoes 	P3 Microbial	Classified P3 due to size of business and type of food.
Cereal processing and medium / low risk bakery	Bread manufacturing. Biscuit manufacturing. Flour and starch products manufacturing. Includes arrowroot, rice, corn, barley, malt, wheat etc. Also includes pulses / legumes. Cereal, pasta and baking mix manufacture.	 Bread Baking powder Breakfast cereal Cake mix Coatings Custard powder English muffin Glucose, gluten Ice-cream cone Dry noodles Pasta, dried or fresh Pastry mix Semolina Un-popped popcorn Perishable fillings if validated as shelf- stable Shelf-stable cakes Shelf-stable cake decoration / fillings / icings 	P3 Microbial Chemical	Processing, baking and low water activity means pathogens unlikely to be present or to grow. Decorations, fillings and icings that have a low water activity do not support the growth of pathogens. Physical contamination to be considered when repackaging flours or dried grains.
Chocolate processing	A large manufacturer of chocolate and similar confectionery.	National producer	P2 Microbial	The size of the chocolate manufacturer determines the classification level. Raw ingredients can introduce contamination to finished product.
Chocolate processing Small producer	Small businesses making chocolates.	 Local producer of chocolate Home-businesses Carob producer 	P3 Microbial	Classified P3 due to size. Less risk due to distribution.
Confectionery processing	Sweets / sugar confectionery. High sugar spreads / condiments. High sugar snack foods.	 Chewing gum Crystallised or glace fruit Liquorice Marshmallow Candied nuts Popcorn - candied Jams, conserves, spreads Honey packing Protein / bliss balls with high sugar syrup or dried fruit content Carob products 	P3 Microbial	Low water activity and processing mitigates against microbial contamination or growth. Low water activity of protein balls due to the amount of sugar syrups and dried fruit added to bind them.

Food	Description	Examples	Risk Hazard	Comments
Cook-chill food Extended shelf-life processing Non-aseptic	Cook chill - Extended shelf- life (ESL) means food that is given a cooking process equivalent to 90°C for 10 minutes. Has a refrigerated shelf-life of more than 10 days if validated.	 Pre-prepared meals Pre-prepared pasta Pre-prepared rice Pre-prepared soups and sauces Baby food 	P1 Microbial	This process delivers a 6 log reduction of non- proteolytic <i>Clostridium</i> <i>botulinum</i> . Evidence of pathogens in long shelf-life cook-chill products in Australia has increased due to inadequate process controls used by inexperienced operators. Potential for recontamination during packing.
Cook-chill food Short shelf-life processing	Cook chill - Short shelf-life perishable foods which have undergone a mild heat or pasteurisation process (generally equivalent to 70° C for 2 minutes). Has a refrigerated shelf-life of no more than 10 days at $\leq 5^{\circ}$ C including the days of production and consumption.	 Pre-prepared meals Pre-prepared pasta Pre-prepared rice Pre-prepared soups and sauces 	P1 Microbial	This process delivers a 6 log reduction in Listeria monocytogenes. Cold chain for chilled transport and storage unreliable with significant potential for microbial growth or recontamination. Generally packaged.
Cook-chill food Extended shelf-life processing Aseptic packaging	Cook chill - Extended shelf- life (ESL) means food that is given a cooking process equivalent to 90°C for 10 minutes. Has a refrigerated shelf-life of more than 10 days if validated.	 Pre-prepared meals Pre-prepared pasta Pre-prepared rice Pre-prepared soups and sauces 	P2 Microbial	This process delivers a 6 log reduction of non- proteolytic <i>Clostridium</i> <i>botulinum</i> . No evidence of botulism from cook- chill products in Australia where process and risks are well managed and understood. Generally industrial scale manufacturing.
Cook-frozen food processing	Cook-frozen food means foods which has undergone a mild heat or pasteurisation process and are intended to be frozen with the intent of reheating prior to eating.	 Pre-prepared meals Pre-prepared pasta Pre-prepared rice Pre-prepared soups and sauces 	P2 Microbial	Substantial documented evidence is available to demonstrate that cook- freeze reliably controls pathogens in food in the community.
Dairy processing Soft cheese processing	A manufacturer or processor of soft and semi- soft cheese (moisture content > 39%) with pH >5.0.	BrieCamembertFetaRicotta	P1 Microbial	Listeria monocytogenes multiplication on soft cheese during long- term cold storage. Cross-contamination risks during processing / handling.

Food	Description	Examples	Risk Hazard	Comments
Dairy processing Not including soft cheese	Includes – milk; cream, butter, buttermilk, margarine, ghee, casein, cheese; whey, cultured milk and yoghurt; ice-cream and ice-cream mix, powdered milk etc.	 Cheese (not soft) Condensed milk Confections, frozen Evaporated milk Flavoured milk Gelato Ice-cream Sour cream Ultra-heat treatment milk Yoghurt Dairy kefir Probiotic dairy beverages Desserts made with milk powder 	P2 Microbial	Pasteurisation is generally considered as reliable and pasteurised milk is considered a medium risk.
Egg processing	Egg product means the content of the egg, as part or whole, in liquid, frozen or dried form. Processed and pasteurised.	 Fresh shell eggs Value added products where egg is the main ingredient Basic egg products including whole eggs, whites, yolks and various blends with or without non-egg ingredients 	P2 Microbial	Cracked eggs have a Salmonella risk.
Fruit and vegetable juice Unpasteurised processing	Fruit juice or vegetable juice that has NOT been heat treated to commercial sterility. Product is intended to be kept under refrigerated storage.	• Unpasteurised juice	P1 Microbial	Unpasteurised juice is a high risk product as it may contain pathogens and support their growth.
Fruit and vegetable juice Pasteurisation processing Shelf-life stable processing	Pasteurised fruit or vegetable juice has undergone a mild heat treatment that will not eliminate all spores, so it requires refrigerated storage. Shelf stable fruit juice and purees have undergone an ultra-heat treatment and therefore do not require refrigeration. Medium or large processor.	• Pasteurised and shelf stable fruit juice, purees and nectars	P2 Microbial	Pasteurised fruit juice may support the growth of pathogens and toxin formation, but pasteurisation and low temperature storage manage this risk. Shelf stable fruit juice is not potentially hazardous since ultra- heat treatment of the product inactivates vegetative cells and spores.

Food	Description	Examples	Risk Hazard	Comments
Fruit and vegetable juice Pasteurisation processing Shelf-life stable processing Small producer	Pasteurised fruit or vegetable juice has undergone a mild heat treatment that will not eliminate all spores, so it requires refrigerated storage. Shelf stable fruit juice and purees have undergone an ultra-heat treatment and therefore do not require refrigeration.	• Pasteurised and shelf stable fruit juice, purees and nectars	P3 Microbial	The size if the manufacturer is used to determine risk classification, small manufacturers are classified as P3.
Fruit and vegetable processing	Ready-to-eat, high risk food: peeling, cutting or combining ingredients to make fruit and vegetable salads or similar products.	 Fruit salad Salad tabouli Raw processed fruit and vegetables (e.g. mousses, slices) 	P1 Microbial	Listeria and Salmonella – uncontrolled or potentially unreliable control steps.
Fruit and vegetable processing Frozen	Manufacturer freezes the produce and is continuously held at – 18°C or below. Includes businesses where: processing includes peeling and slicing; not all products blanched i.e. berries; large volumes are produced.	 Fruit (frozen) Vegetable (frozen) 	P2 Microbial	Time / temperature control to limit microbial growth during processing and the blanching process are strong controls against microbial hazards. Frozen storage at less than - 18°C is recommended.
Fruit and vegetable processing Frozen blanch, Wash / pack, Dehydrating, Condiments, Small producer	Small manufacturers that blanch all products. Small manufacturers that dehydrate fruit and vegetables. Manufacturing low pH / low water activity condiments. Growers that wash or pack low risk whole fruit and vegetables.	 Fruit (frozen) Vegetable (frozen) Packing low risk fruit and vegetables (e.g. citrus, potatoes, onion, carrots etc.) Washing low risk whole fruit and vegetables Dehydrating e.g. dried apricots Chutney, sauces, relishes 	P3 Microbial	The size of the manufacturer is used to determine the risk classification. Pre- preparation e.g. blanching, peeling of fruit and vegetables may risk dehydrated products. Condiments etc. are usually cooked and hot filled and have low pH / low water activity.
Infant formula processing	Processor or manufacturer of infant formula.	 Baby formula Infant formula Follow-on formula Lactose free formula Low lactose formula Pre-term formula 	P1 Microbial	Specifically manufactured for a vulnerable population – can contain Salmonella and Cronobacter sakazakii.
Meat processing	Includes boning, packaging, handling and storage of meat.	 Meat packaging and storage Lard, tallow rendering 	P2 Microbial	Red meat is considered a high risk food as it may contain microorganisms that are able to grow if temperature is not controlled.

Food	Description	Examples	Risk Hazard	Comments
Meat processing Fermented meat processing Smallgoods processing	Fermented (salami), cured and preserved meats, such as bacon and ham, and manufacturing of smallgoods or prepared meat products not elsewhere classified.	 Bacon Corned meat Pâté Poultry smallgoods Salami Dried meats 	P1 Microbial	E.coli (EHEC / STEC) in fermented meat products and Listeria in long shelf-life manufactured meat products demonstrate the risk associated. Meats can be cured by salting, drying, pickling or smoking.
Oils and fats processing	Manufacturing of crude vegetable or marine animal oil, fat, cake or meal, margarine, compound cooking oil or fat, blended table or salad oil or refined or hydrogenated oil or fat.	 Vegetable oil Edible oil or fat Fish or other marine animal oil Lard or tallow, refined Margarine Olive oil Oil based marinades / dressings 	P3 Microbial	Low water activity precludes microbial growth. Safety of marinades and dressing with other ingredients depends on pH <4.6, water activity, cooking or cooling steps.
Peanut Butter and Nut processing	Peanut butter means a peanut spread containing no less than 850g / kg of peanuts.	 Peanut butter manufacturing Other nut butters and pastes Nut processing / packing 	P2 Microbial	Salmonella can be eliminated from nuts by roasting however if recontamination with Salmonella occurs, the pathogen can survive. Peanut butter does not require refrigeration.
Peanut Butter and Nut processing Small producer	Peanut butter means a peanut spread containing no less than 850g / kg of peanuts. Small manufacturers are classified P3.	 Peanut butter manufacturing (small or retail premises) Other nut butters and pastes Nut processing / packing 	P3 Microbial	Salmonella can be eliminated from nuts by roasting however if recontamination with Salmonella occurs, the pathogen can survive. Peanut butter does not require refrigeration.
Poultry processing	Preparing and processing, chilling, freezing or packaging (including canning) the whole or selected parts of bird carcasses.	 Frozen poultry manufacturing Poultry meat processing and packing 	P1 Microbial	Substantial evidence of failure in the community – residual contamination <i>Salmonella</i> and <i>Campylobacter</i> .
Prepared Ready-to-eat food processing	This food is normally consumed in the same state as which it is sold (i.e. without further cooking or preparation). This is a generic category, if ready to eat food products are classified elsewhere in the table, that risk profile must be used. Refrigerated high risk foods and non- refrigerated medium risk foods included.	 Sandwich / salad manufacturing Wet noodles / tofu Fresh cut fruit and vegetable processing Pesto Non-dairy dip / dressing processing Non-dairy beverages (e.g. almond milk) Food for catering purposes Manufactured meats Salami 	P1 Microbial	Demonstrated uncontrolled hazard. <i>Salmonella</i> in salads. Reheating is generally not regarded as a preparation step. Many RTE foods require refrigeration. For fruit and vegetable processing <i>Listeria</i> and <i>Salmonella</i> uncontrolled or control steps are potentially unreliable.

Food	Description	Examples	Risk Hazard	Comments
Prepared Not ready-to-eat food processing	Not-ready-to-eat (NRTE) products are identified as "raw" and require further cooking or preparation by the consumer. Some products may have undergone partial heat treatment. Food requires frozen or refrigerated storage.	 Frozen food meals (e.g. pizzas, pies, TV dinners) Marinated, stuffed and / or crumbed meat, fish or chicken 	P2 Microbial	Can contain the presence of pathogens that could cause foodborne illness. These foods are described as requiring frozen or refrigerated storage and are not intended to be consumed without cooking.
Salt and other low risk ingredients / additives processor	Manufactures salt or similar low risk ingredients or additives.	 Salt production / packing Sugar packing Food acids (liquids / powder) Colours Calcium chloride Preservatives Artificial sweeteners 	P3 Physical	The inherent nature of these products does not support the growth of pathogens.
Seafood processing Mollusc processing	Bivalve molluscs intended for human consumption.	 Cockles Clams Mussels Oysters Pipis Scallops 	P1 Microbial	Refer to PP Standard 4.2.1.
Seafood processing	Includes the filleting, cutting into portions, brining and the packing, treating, washing, freezing, refrigeration or storing of seafood.	 Uncooked fish product Whole fish Fish fillets Reformed fish cakes 	P2 Microbial	Fish fillet and deboning operations do not contribute significantly to microbial food safety.
Seafood processing Ready-to-eat and shelf stable	Includes smoking, cooking and collecting caviar. It does not include sushi processing or mollusc processing.	 Caviar Seafood salad products Smoked cooked fish Smoked salmon Fish sauce Canned fish Pickled shellfish 	P2 Microbial	Chilled or frozen, requires no further cooking prior to consumption. Shelf stable stored at ambient temperature.
Snack chip processing	Potato, corn and other crisp manufacturing.	 Corn chip Crisp Potato Crisp Taco, tortilla or tostada shell 	P3 Microbial	Frying and low water activity mitigate against microbial hazards being present or able to grow.
Spice and dried herbs processing	Manufacturers of dehydrated culinary herbs and spices.	• Dried herbs and spices	P2 Microbial	Low water activity but may contain heavy microbial load.
Spice and dried herbs processing Small producer	Small manufacturers of dehydrated culinary herbs and spices.	• Dried herbs and spices	P3 Microbial	The size of the manufacturer is used to determine the risk classification.

Food	Description	Examples	Risk Hazard	Comments
Sprout processing	Processor of spouts including washing, drying or packing of seed sprouts; chilling and storage of seed sprouts or transport of seed sprouts. Usually sold as ready-to-eat, refrigerated storage.	 Alfalfa Fenugreek Mung bean Pea sprouts	P1 Microbial	High risk – refer to Standard 4.2.6.
Sushi processing	Sushi is rice, acidified with vinegar, and usually combined with other ingredients such as raw fish.	 Nigiri Gunkan Norimaki Temaki Temakizushi Oshizushi Inari 	P1 Microbial	Controls include limitation on storage time, storage and display temperature, appropriate cooling and storage of rice to minimise <i>Bacillus cereus</i> and acidification to prevent other pathogen growth. P1 based on widespread consumption.
Vegetables in oil and vegetable fermentation processing	The use of oil, brine, water and vinegar to preserve vegetables. Acidified, submerged in oil etc., ambient or refrigerated storage. Fermentation of vegetables drops the pH.	 Chopped garlic Garlic cloves Sun-dried tomatoes Chilli Ginger Eggplant Capsicum Mushrooms Olives Kimchi Sauerkraut Marinades containing garlic or other vegetables if pH water activity is unknown / not hot filled 	P1 Microbial	The Food Standards Code requires that this class of product must not have a pH >4.6. Possible acidifying agents include vinegar, acetic acid, citric acid and lemon juice. Risk of spore former / toxin production i.e. <i>Clostridium botulinum</i> .

7. Risk classification – Food transporter

Businesses engaged in transport or pre-retail distribution activities (particularly importation, wholesaling, wholesale storage and multipurpose wholesalers who distribute not only to retailers but also to restaurants or consumers).

Food	Description	Examples	Risk Hazard	Comments
Dairy produce distributor	Mainly engaged in wholesaling dairy produce, ice-cream and other frozen dairy desserts. Does not include distributors of soft cheeses.	 Butter Hard cheese Cream Yoghurt Frozen dairy dessert Ice-cream Milk 	P3 Microbial	Pasteurisation and packaging provide protection against contamination.
Dry goods and beverages distributor	Business handles only low risk packaged food. Does not repack. Goods are generally solid and do not require refrigeration or freezing.	 Bottled water Canned food Cereal food Condiments Confectionery Cooking oil or fats Cordial Honey Infant formula Nuts Potato chips 	P4 Chemical	Products not likely to support microbial growth.
Frozen food distributor	Food preserved by freezing and packaged for wholesale distribution. Medium risk foods, large volumes.	 Frozen fruit Frozen vegetables Frozen fish / seafood Frozen ready meals 	P3 Microbial	Cook – freeze reliably controls pathogens in food.
Fruit and vegetables distributor	Business mainly engaged in wholesaling fresh fruit or vegetables.	Fresh fruitFresh vegetables	P3 Microbial Chemical	Uncut fruit and vegetables unlikely to become contaminated with microorganism or chemicals.
High risk food distributor	High risk food, generally perishable ready-to-eat, refrigerated storage, packaged product.	 Fresh cut fruits and vegetables Ready-to-eat packed foods Smallgoods Soft cheeses 	P2 Microbial	Prior processing in the supply chain is important for safety. Safety relies on the integrity of the cold chain. Distributor has a responsibility to maintain refrigerated storage.
Medium risk food distributor	Medium risk foods are those which may contain harmful natural toxins or chemicals introduced at steps earlier in the food supply chain. Business handles low risk or medium risk food. Includes unpackaged and repackaged food.	 Salami Vegetables stored in oil Peanut butter Shell eggs Milk-based confectionery Hard frozen, ice-cream Bulk flour Water carter (approved source) 	P3 Microbial Chemical	Distribution does not affect risk.

Food	Description	Examples	Risk Hazard	Comments
Processed meat distributor	Mainly engaged in wholesaling fresh or frozen meat, bacon, ham or poultry. Does not include fermented meats.	 Bacon Frozen meat Ham Meat Poultry Sausage 	P2 Microbial	Products may harbour pathogens. Temperature control is important to minimise potential for growth.
Seafood distributor	Mainly engaged in wholesaling fresh or frozen seafood (except canned). Excludes live seafood.	 Crustaceans Fish Molluscs (including processed) Seafood, fresh or frozen 	P2 Microbial	Products may harbour pathogens. Temperature control is important to minimise potential for growth.

8. Quick reference guide

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9. High, medium and low risk foods

This table provides examples of high, medium and low risk foods.

Food type	Definition	Example foods
High risk food	Foods that may contain pathogenic microorganisms and will support formation of toxins or growth of pathogenic microorganisms.	Any potentially hazardous food – • Raw and cooked meat and poultry • Seafood (excluding live) • Cooked rice and pasta • Dairy products (e.g. custard and cream) • Sprouted seeds • Prepared salads • Cut fruits • Foods containing eggs (cooked or raw) Ready-to-eat foods containing any of the above foods (e.g. sandwiches, sushi, laksa)
Medium risk food	Foods that may contain harmful natural toxins or chemicals introduced at steps earlier in the food supply chain; or that: may contain pathogenic microorganisms but will not normally support the formation of toxins or growth of pathogens due to food characteristics; or are unlikely to contain pathogenic microorganisms due to the food type or processing but may support the formation of toxins or growth of pathogenic microorganisms.	 Whole fresh fruit and vegetables Pasteurised milk Pasteurised fruit juice Canned foods Hard frozen ice-cream Chocolate Yoghurt Vegetables in oil Mock cream
Low risk food	Those foods that are unlikely to contain pathogenic organisms and will not support their growth; and will not introduce microbial, physical or chemical hazards to the foods they sell or handle.	 Biscuits and crackers Uncooked grains Cereals Carbonated beverages Alcohol Fats and oils Sugar-based confectionery Spices

10. References

ANZFA Food Safety: The priority classification system for food businesses. A risk-based system designed to classify food businesses into priority ratings based on the risk they present to public health and safety.

Information paper, Canberra (2001) http://www.foodstandards.gov.au/publications/Pages/thepriorityclassific352.aspx

Australian Bureau of Statistics (2006) Australian and New Zealand Standard Industrial Classification

Department of Health and Ageing (Commonwealth) 2007, The Business Sector Food Safety Risk Priority Classification Framework, Canberra. <u>https://www1.health.gov.au/internet/fr/publishing.nsf/Content/37F08208FAC6F504CA2582A40027AA</u> <u>90/\$File/FRSC-RPF2007.pdf</u>

Draft for Food Regulation Standing Committee (2009) Risk Profiling Framework Example Classifications

FAO (2011) Guidelines for risk categorization of food and food establishments applicable to ASEAN countries

(Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific Bangkok 2011)

Food Standards Agency Food Safety Act 1990 Code of Practice on Food Hygiene Inspections (Code of Practice No. 9 Second Revision October 2000)