

# Innovation In Food Networks New Zealand



# Agenda

- Overview of the New Zealand Food Innovation Network
- Outline the services and capabilities of the FoodSouth hub
- Explain how it's relevant to value-added food producers
- Question and Answer

# The reason for the Food Innovation Network



Help to grow F&B industry and exports. Provide a range of facilities and resources to assist companies in New Product Development

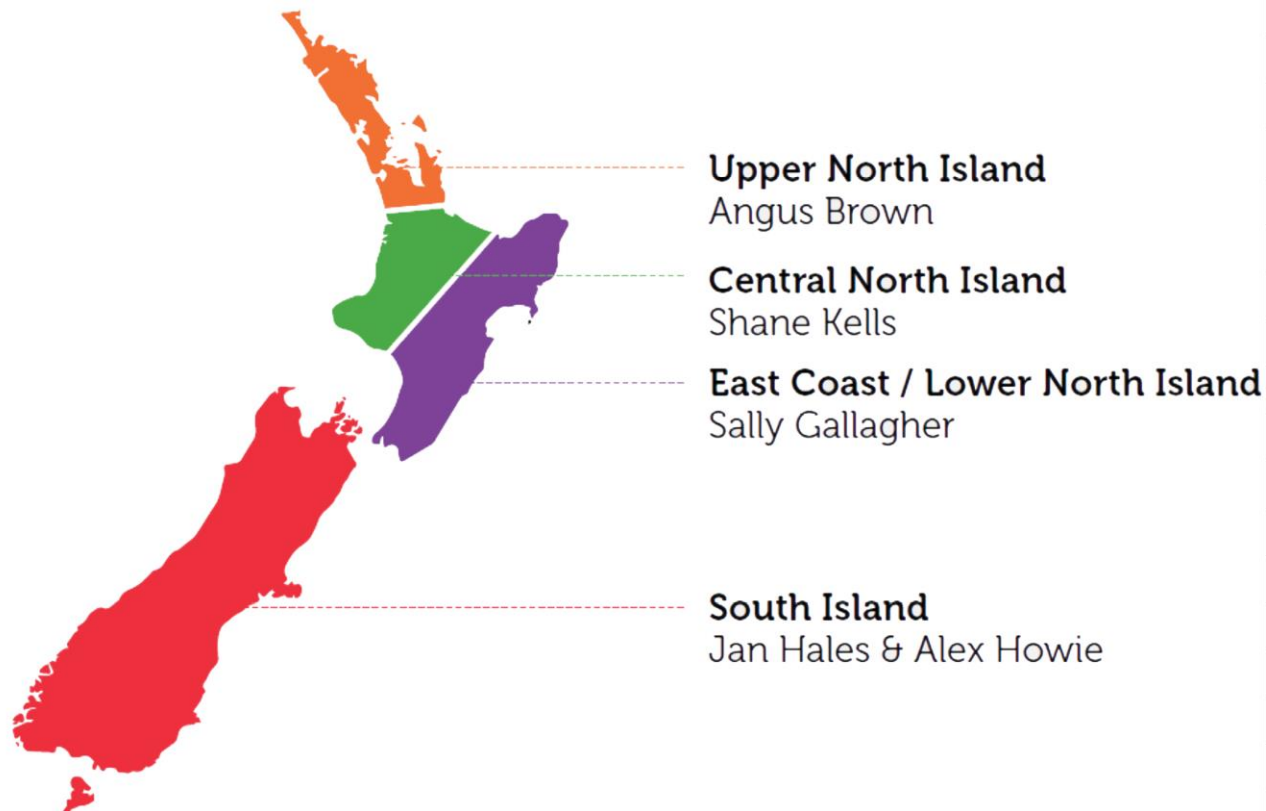
# Role of Food Innovation Network

- To stimulate the export of processed foods
- To enhance the efficiency of New Product Development
- To build food & beverage industry capability

by

- Open access development support
- Facilitation - connections to service providers
- Advocacy, e.g. drying capability

# Internal Network



# External Network

Regional Economic Development Agencies

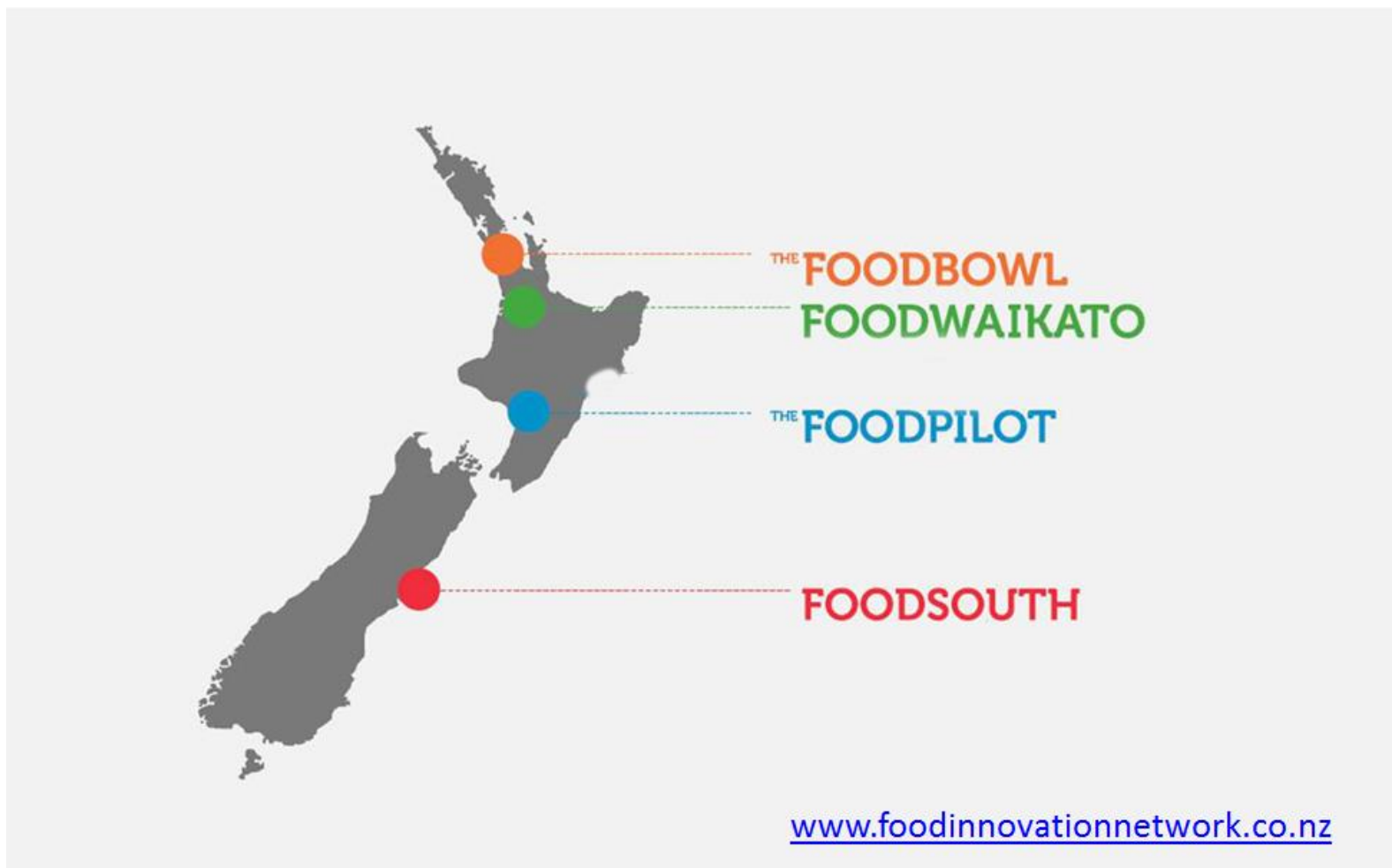
## CallaghanInnovation

### New Zealand Food Innovation Network

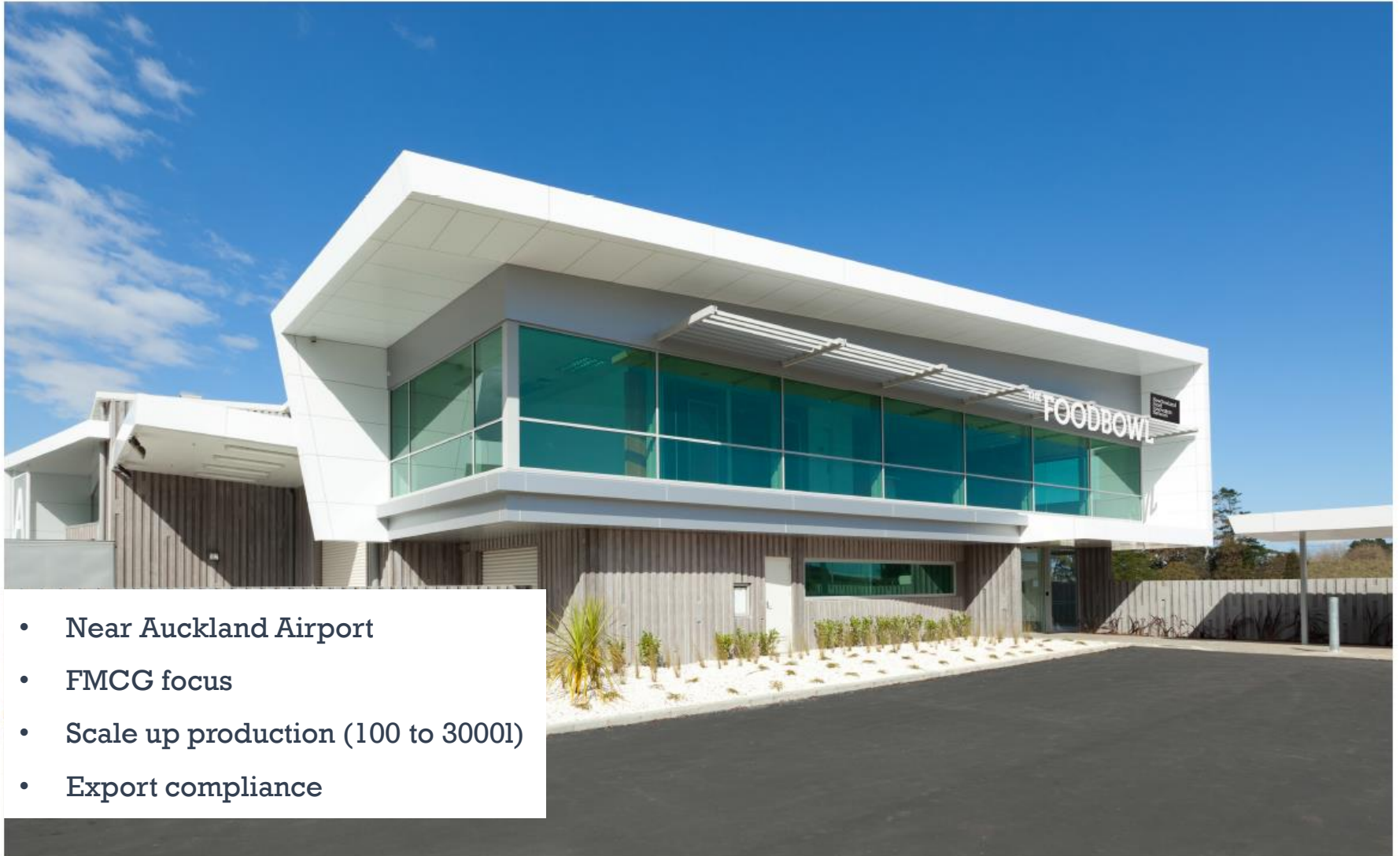


Capability Providers

# Food Innovation Hubs



# THE **FOODBOWL**



- Near Auckland Airport
- FMCG focus
- Scale up production (100 to 3000l)
- Export compliance



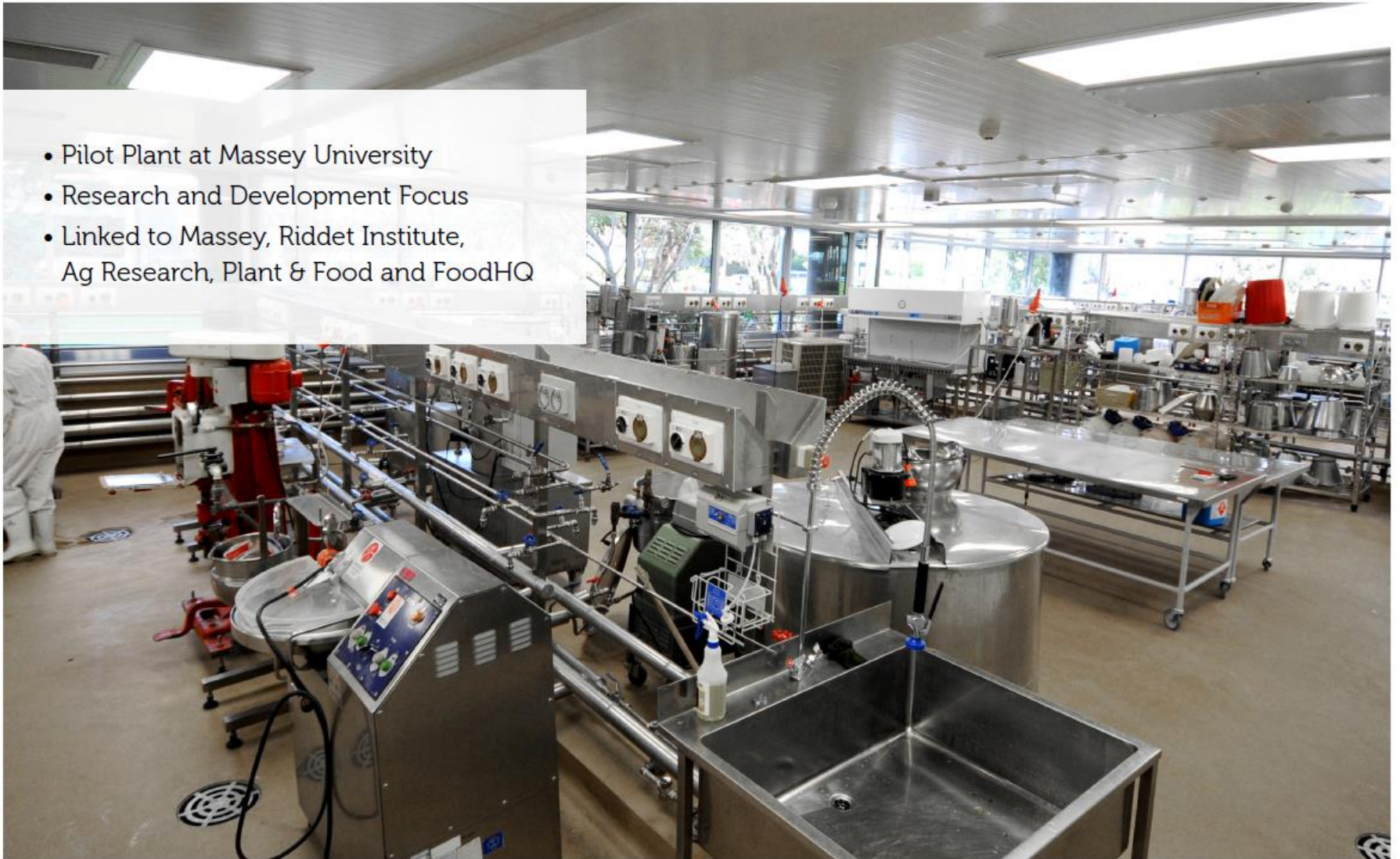
# FOODWAIKATO

- Purpose Built 500kg/hour Spray Dryer
- Dairy and Non-Dairy Products
- Contract Model



# FOOD PILOT

- Pilot Plant at Massey University
- Research and Development Focus
- Linked to Massey, Riddet Institute, Ag Research, Plant & Food and FoodHQ



# FOODSOUTH

- Pilot Plant at Lincoln University
- Technical and market advice
- Product development focus
- Small scale production (20 to 200l)
- Export compliance



**FOODSOUTH**

New Zealand  
Food  
Innovation  
Network

# FoodSouth Services

- Support for New Product Development Projects
- Business Advice
- Professional Services
- Capability Building
- **Infrastructure**
  - Three open access development spaces
  - Equipment and support
  - Food safety accreditations



# Business model

- Introductory advice and project shaping – free
  - Includes introductions to relevant providers
- FoodSouth Projects are for fee
  - Room hire: \$1,000 to 2,500 per day depending on project nature
  - Professional Services: \$1,200/day
  - Education/Workshops: specific rate/course

# FoodSouth Equipment

Units of operation	Key equipment
Product Development Kitchen	On wheels
Kitchen fit out	Grill, Oven
Extrusion	Extruder, Enrober (Rheon)
Baking	Oven for Baking and Steaming, Dough Developer, Formatic
Heat Transfer	Heat exchangers, Blast Freezer/Chiller
Mixing	Beaters, Mixers, Emulsifier and Dry blender
Packaging	Liquid fillers, Powder filler, Vacuum sealing, Flow Wrapper
Size Reduction	Chopper, Grinder, Mill, Homogeniser, Band Saw, Slicer
Separation	Plate and GAF Filters
Preservation	Heat Pump Drying
Vessels	Range of pans and tanks 50 – 200 litre
Pumps	Lobe, Centrifugal, Air and Flexible impeller
Instrumentation	Logger, Temp Control, Balances, pH, Texture
Facilities	Steam, Hot Water, Chiller, Freezer, Air
Other	Shelving, Tables, Buckets, Utensils etc.

# Common food processing steps

<b><i>Jams</i></b>	<b><i>Biscuits/bars</i></b>	<b><i>Meat processing</i></b>	<b><i>Sauces</i></b>	<b><i>Soft drinks/syrups</i></b>	<b><i>Mayonnaise</i></b>
Cleaning	Mixing	Cutting	Cleaning	Water treatment	Mixing
Cutting	Baking	Deboning	Soaking	Blending	Heating
Mashing	Cooling	Skinning	Crushing	Carbonation	Cooling
Gelating	Cutting	Smoking	Sieving	Filtering	Emulsification
Cooling	Dicing	Sausaging	Mixing	Sterilisation	Steam injection
Filling	Slicing	Filling	Heating	Degassing	Packaging
Mixing	Moulding	Sterilization	Ripening	Bottling	
Packaging	Injection	Brining	Fermenting		
	Blending	Tumbling	Cooling		
	Rolling	Forming	Packaging		
	Pressing	Cooking			
	Extruding	Mincing			
	Layering	Drying			
	Packaging	Mixing			
		Packaging			

# Potential additions

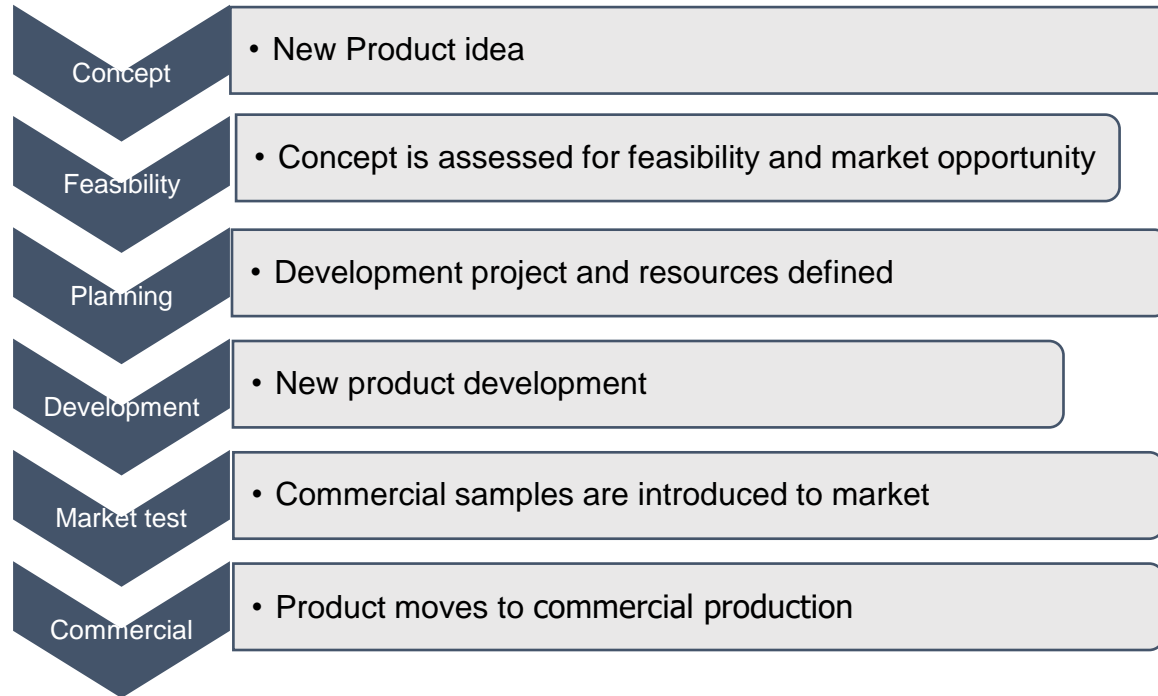
Units of operation	Key equipment
Preservation	UHT direct/indirect for liquids, ESL
Drying	Roller Drying, Refractance Window, CO2 Freeze Drying, Microwave Vacuum Drying, Freeze Drying
Preservation	Pressure Assisted Temperature Sterilising, Ohmic Heating, Pulsed Electric Field, Irradiation
Separation	Ion Exchange, Clarifier, Decanter
Fermentation	Fermenter
Packaging	Form-Fill-Seal, Modified Atmosphere Packaging
Ice cream	Soft Serve Machine
Confectionery	Coatings, Conditioner, Chocolate Processing
Meat/Seafood	Sausage Filling, Smoking
Others ?	



# How might this help you?



Value added products from concept to market




# Summary

- Help with value added products
- Market and technical
- Physical product development infrastructure
- Highest level of food safety accreditation
- Concept to export



A New Zealand  
Food Innovation  
Network



FoodSouth – 3 News Video

<http://www.3news.co.nz/nznews/cookie-flavours-tested-in-new-food-hub-2015112917#axzz3srBVJdvo>