

**SKILLS FRAMEWORK FOR FOOD MANUFACTURING
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE DOCUMENT**

TSC Category	Research and Development					
TSC	Recipe Formulation					
TSC Description	Innovate new food products through the creation and refinement of new recipes					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
				FMF-RND-4011-1.1	FMF-RND-5011-1.1	
				Refine recipe formulation for new products to be mass-produced in the kitchen	Create new food product prototypes with consideration of feedback received	
Knowledge				<ul style="list-style-type: none"> • Food hygiene, safety license requirements and organisational requirements for recipe specifications • Implications of recipes, ingredients, cooking techniques and parameters on mass production • Impact of portion control on organisation profitability and food quality • Significance of recipe specifications on cooking times, equipment settings and storage requirements • Techniques for determining products' best-before dates and extending shelf life • Common techniques, processes and substitute ingredients used for preservation and/or extension of products' shelf life • Methods of substituting ingredients without drastically impacting flavour or quality 	<ul style="list-style-type: none"> • Impact of brand image, organisation guidelines and standards on product development processes • Emerging trends in food selection and ingredients • Consumer purchasing trends and factors influencing consumer preferences • Prototype development processes • Preparation and cooking techniques • Characteristics and sensory profiles of new ingredients, possible ingredient interactions and substitutions • Processes for experimenting and improving prototypes • Importance, and process, of documenting steps taken during prototyping • Required tests to identify hygiene and quality parameters for food product prototypes • Methods to measure consumer appreciation 	

**SKILLS FRAMEWORK FOR FOOD MANUFACTURING
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE DOCUMENT**

				<ul style="list-style-type: none"> • Manpower requirements and equipment processing parameters for mass production of new food products • Methods of communicating new standard operating procedures (SOPs) and quality standards to production staff • Staff training on processes and parameters to prepare new products 	<p>of new dishes and menus</p>	
Abilities				<ul style="list-style-type: none"> • Create recipe formulation for production and refine recipe specifications for cooking in mass quantities • Establish key internal food quality standards for new products • Develop production guidelines for new products, including automation, by analysing prototype recipes and available equipment • Identify appropriate staff and equipment parameters for manufacturing new food products • Brief and train production staff on new standard operating procedures (SOPs) and quality standards for new food products • Modify workflows in production lines for new food products 	<ul style="list-style-type: none"> • Experiment with different ingredients and cooking techniques to create prototypes and modify recipes to suit market trends • Source and incorporate new ingredients into dishes • Adjust required preparation and cooking techniques for new dishes • Refine product prototypes using results from benchmarking, blind taste tests and trial results • Forecast and assess the potential of new dishes • Document key information in the prototype creation process to highlight required equipment, sourcing requirements and costing information • Monitor properties of product prototypes and ensure that all regulatory 	

**SKILLS FRAMEWORK FOR FOOD MANUFACTURING
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE DOCUMENT**

				<ul style="list-style-type: none"> • Monitor production processes and final products for process efficiency and product quality • Check new food products against food hygiene and safety requirements • Evaluate and apply techniques to improve products' shelf life while maintaining taste profiles • Create new product rollout plans for the production lines, in consultation with relevant production staff 	<p>requirements and organisation quality standards are met</p>	
--	--	--	--	---	--	--