



**RWANDA FDA**  
Rwanda Food and Drugs Authority

Doc No: FD/FRIC/CKL/007

Version: 1

Effective Date: ..../..../2024

### TEST PARAMETER REQUIREMENTS FOR PROCESSED FOOD REGISTRATION

S/N	Product category	Product Sub-category and/or description	Key test parameters	
			Microbiology	Physicochemical
1	Cereal and cereal based products	Milled rice	NA	1. Moisture content 2. Broken kernels 3. Live pests 4. Heavy metals: Lead (Pb)
		- <b>Grain flour;</b> including wheat flour, milled maize (corn) flour, milled sorghum flour, millet flour, barley and other grains; - <b>Processed cereal-based products; such</b> as pastas, noodles and like products; breakfast cereals such as cornflakes, puffed grains, oats, muesli , instant grains; groats, semolina, breads and grain dough products; maize/corn starch; etc.; excluding snacks such as chips, cornmeal porridge, and cooked packaged maize;	1.Total viable count (TVC) 2. <i>Salmonella</i> spp. (for instant cereals) 3. <i>Escherichia coli</i> (for instant cereals) 4. <i>Staphylococcus aureus</i> ( for instant cereals) 5. <i>Bacillus cereus</i> (for cooked cereals)	1. Moisture content; 2. Total Aflatoxin; 3. Aflatoxin B1; 4. Crude protein (wheat flour)
		<b>Other maize/corn derived products;</b> ssuch as cornmeal porridge, and cooked packaged maize)	1. Total aerobic count (TVC)	1. Total Aflatoxin 2. Aflatoxin B1
		<b>Fortified cereal based food products for old children and adults</b>	1. Total aerobic count (TVC) 2. <i>Escherichia coli</i>	1. Moisture content, 2. Acid Insoluble Ash

			3. <i>Salmonella</i> spp	3. Vitamin A 4. Minerals : Iron and Zinc 6. Aflatoxin B1
2	<b>Processed roots, tubers and plantains</b>	<b>Dried, Cooked, Fried and Flours;</b> excluding cassava products	1. Total aerobic count (TVC) 2. Yeast and moulds	1. Moisture content (for dried and flours and products) 2. Peroxide value (for fried products)
		<b>Frozen products</b>	1. Total aerobic count (TVC) 2. Yeast and moulds	N/A
		<b>Canned or bottled (pasteurized) or retort pouch</b>	1. Total aerobic count (TVC) 2. <i>Clostridium perfringens</i>	N/A
		<b>Cassava products;</b> including cassava flour, Cassava chips and crisps, Cassava wheat composite flour, etc.	1. Yeast and moulds (for flours and chips) 2. Total aerobic count (TVC) for crisps	1. Moisture content 2. Heavy metals : Lead (Pb) 3. Hydrogen cyanide (HCN) 4. Peroxide Value (for crisps)
		<b>Processed Legumes, Pulses and Seeds and their products;</b> such cooked, Dried, Canned, Frozen; excluding soybeans.	1. Total aerobic count (TVC) 2. Yeast and moulds 3. <i>Listeria monocytogens</i> (for frozen products )	1. Moisture content for dried, roasted products 2. Acid insoluble ash for flour products 3. pH for canned products 4. Peroxide value for roasted products 5. Total aflatoxin for ground nut and peanut products
3	<b>Pulses, seeds and nuts-based products</b>	<b>Processed Soybean and soy-based products;</b> such as Soy Protein products such as Tofu, Soy Milk, Edible full fat Soy Flour; excluding Edible soybeans oil.	1. Total aerobic count (TVC) 2. <i>Escherichia coli</i>	1. Moisture Content (for soy curds, texturized soy proteins, soy protein flours and soy imitation meat) 2. Protein content 3. Acid Insoluble ash for Edible full fat soy flour

		<b>Milk powder and cream powder products</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Escherichia coli</i></li> <li>3. <i>Staphylococcus aureus</i></li> <li>4. <i>Salmonella</i> spp.</li> </ol>	<ol style="list-style-type: none"> <li>1. Moisture content</li> <li>2. Aflatoxin M1</li> <li>3. Milk fat</li> </ol>
4	<b>Processed Milk Products/ Dairy products</b>	<b>UHT Milk products</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Salmonella</i> spp.</li> <li>3. <i>Staphylococcus aureus</i></li> </ol>	<ol style="list-style-type: none"> <li>1. Aflatoxin M1</li> <li>2. Milk fat</li> <li>3. Milk solid non-fat</li> </ol>
		<b>Fermented Milk Products; Including Yoghurts, Cheese and Butter, Ghee, etc.</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Escherichia coli</i></li> <li>3. <i>Salmonella</i> spp.</li> <li>4. <i>Staphylococcus aureus</i></li> </ol>	<ol style="list-style-type: none"> <li>1. Aflatoxin M1</li> <li>2. Milk fat</li> <li>3. Free fatty acid as oleic acid (for butter and ghee)</li> <li>4. Peroxide value (for ghee)</li> </ol>
		<b>Other processed milk products; including Flavoured milk products, Pasteurized milk products, sweetened condensed milk products, Dairy Ices and Ice cream, etc.</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Escherichia coli</i></li> <li>3. <i>Salmonella</i> spp.</li> <li>4. <i>Staphylococcus aureus</i></li> <li>5. <i>Listeria monocytogenes</i></li> </ol>	<ol style="list-style-type: none"> <li>1. Aflatoxin M1</li> <li>2. Milk fat</li> <li>3. Titratable acidity as lactic acid (for flavoured milk)</li> <li>4. Milk solid non-fat (for Flavoured and sweetened condensed milk products)</li> </ol>
		<b>Processed eggs such as dried, frozen, and liquid egg products;</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Salmonella</i> spp.</li> <li>3. Enterobacteriaceae</li> </ol>	<ol style="list-style-type: none"> <li>1. Moisture content for dried and powdered egg products</li> </ol>
5	<b>Egg products</b>	<b>Mayonnaise</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Salmonella</i> spp.</li> <li>3. <i>Listeria monocytogenes</i></li> </ol>	<ol style="list-style-type: none"> <li>1. pH</li> </ol>
		<b>Processed fish products; such as dried, frozen, fermented, marinated, pickled, salt-preserved, smoked, fried, canned or jarred, and manufactured fish products such as fish sausages and fish pastes</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Clostridium perfringens</i> (canned and jarred)</li> <li>3. <i>Staphylococcus aureus</i></li> </ol>	<ol style="list-style-type: none"> <li>1. Formaldehyde</li> <li>2. Histamine ( frozen, fermented, dried)</li> <li>3. Free fatty acids ( smoked and fried)</li> <li>4. Mercury as Methyl mercury</li> </ol>

			<p>4. <i>Listeria monocytogenes</i> ( for frozen products and fresh fish sausages)</p> <p>5. <i>Vibrio spp.</i></p> <p>6. <i>Salmonella</i> spp. ( fresh fish sausages)</p>	5. Moisture content ( dried )
6	<b>Fish products</b>	<b>Processed meat products;</b> including cooked, smoked, dried, fermented, canned, salted; excluding poultry.	<p>1. Total viable count (TVC)</p> <p>2. <i>Escherichia Coli</i></p> <p>3. <i>Salmonella</i> spp.</p>	1. Veterinary drugs
7	<b>Meat products</b>	<b>Poultry products;</b> including cooked, smoked, dried, fermented, canned, salted, etc.	<p>1. Total viable count (TVC)</p> <p>2. <i>Salmonella</i> spp.</p> <p>3. <i>Clostridium perfringens</i> (canned)</p> <p>4. Campylobacter</p>	1. Veterinary drugs
		<b>Processed insect products;</b> such as dried insects, fried insects and manufactured products such as powdered insects	<p>1. Total viable count (TVC)</p> <p>2. <i>Escherichia Coli</i></p> <p>3. <i>Salmonella</i> spp.</p> <p>4. <i>Staphylococcus aureus</i></p> <p>5. Campylobacter</p>	<p>1. Moisture content</p> <p>2. Fatty acidity</p> <p>3. Total ash</p> <p>4. Acid insoluble ash</p>
8	<b>Edible insects and grubs products</b>	<b>Pre-packaged processed vegetable products;</b> dried and other ways of industrial processing, excluding starchy and sugary roots and tubers	<p>1. Total viable count (TVC)</p> <p>2. <i>Escherichia Coli</i></p> <p>3. <i>Salmonella</i> spp.</p> <p>4. <i>Clostridium botulinum</i> (canned)</p> <p>5. Yeast and mould</p>	<p>1. Moisture content;</p> <p>2. Acid insoluble ash</p> <p>3. Hydrocyanic acid for Isombe</p> <p>4. Tomato soluble solids for tomato concentrate</p> <p>5. Pesticide residues for tomato products</p>
9	<b>Processed vegetable products</b>	<b>Dried fruits of any kind;</b> processed including dried, candied or fermented	<p>1. Total viable count (TVC)</p> <p>2. <i>Escherichia coli</i></p> <p>3. <i>Salmonella</i> spp.</p> <p>4. Yeast and mould</p>	<p>1. Moisture content</p> <p>2. Acid insoluble ash</p> <p>4. Heavy metal: Lead (Pb)</p>

10	<b>Processed fruit products</b>	<b>Canned and jarred fruits</b> including canned and jarred, pickled, preserved in vinegar brine, etc. Excluding jams, marmalades, fruit jellies	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Escherichia coli</i></li> <li>3. <i>Clostridium botulinum</i> (canned)</li> </ol>	1. Heavy metals: Lead (Pb), Arsenic
		<b>Edible fats and oils;</b> Oils, butters and margarines derived from fruits such seeds such as sunflower, rapeseed and soybean, and other plants such as palms, etc.; excluding olive oils; lards, tallows, fats, butters and oils of animal origin; as well as blended edible oils.	<ol style="list-style-type: none"> <li>1. Yeast and mould ( for butter and margarines)</li> </ol>	<ol style="list-style-type: none"> <li>1. Peroxide value</li> <li>2. Acid value</li> <li>3. Sudan Dyes (for Palm Oil)</li> <li>4. Aflatoxin (for groundnut edible oil)</li> <li>5. Vitamin A for fortified edible fats and oils</li> </ol>
11	<b>Fats and oils</b>	<b>Olive Oils and Olive Pomace Oils</b>		<ol style="list-style-type: none"> <li>1. Peroxide value</li> <li>2. Total fatty acid composition</li> <li>3. Total sterols</li> </ol>
		<b>Edible fat and oils of animal origin</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC);</li> </ol>	<ol style="list-style-type: none"> <li>1. Peroxide value</li> </ol>
		<b>Dough-based sweets;</b> Sweets made predominantly with dough— such as bakery and pastry products (fried and baked sweet doughs, laminated dough, cakes, cookies, biscuit, crackers, waffles, etc.) – which may also contain non-cereal components such as creams, fillings and toppings.	<ol style="list-style-type: none"> <li>1. Total viable count (TVC);</li> <li>2. <i>Salmonella</i> spp.</li> <li>3. Yeast and moulds</li> <li>4. <i>Escherichia coli</i></li> </ol>	<ol style="list-style-type: none"> <li>1. Acid insoluble ash</li> <li>2. Moisture content (for dry biscuits, crackers and cookies)</li> <li>3. Peroxide value</li> </ol>
12	<b>Dough-based products</b>	<b>Fruit- and nut-based sweet;</b> Sweets made predominantly from fruits or nuts, or in some cases vegetables – where these ingredients are processed with sugar (candied or chocolate coated fruits, jams, marmalades, fruit jellies, etc.) – but which may also contain other ingredients.	<ol style="list-style-type: none"> <li>1. Total viable count (TVC);</li> <li>2. <i>Staphylococcus aureus</i></li> <li>3. Yeast and moulds</li> <li>4. <i>Clostridium botulinum</i> (canned)</li> </ol>	<ol style="list-style-type: none"> <li>1. Total soluble solids</li> </ol>

13	<b>Sweets and sugars</b>	<b>Solid Sugar and sugar products</b> These include white sugar, dextrose anhydrous, dextrose monohydrate, Fructose Lactose, Brown sugars	NA	1. Moisture content 2. Heavy Metals: Lead (Pb), Arsenic (As)
		<b>Other Sugars and Sugar Products</b> These include Syrups (maple syrup, molasses and similar), Icing Sugar, maltodextrins (maltodextrin, dextrin and polydextrose) and others (polyols, polyfructoses, etc.)	1.Total viable count (TVC) 2. Enterobacteriaceae 3. Yeast and moulds	1. Heavy Metals: Lead (Pb), Arsenic (As) 2. Moisture content for powdered products 3. Polarisation °Z (for molasses )
		<b>Honey</b>	1. Yeast and moulds	1. Moisture content 2. Sucrose content 3. Hydroxymethylfurfur (HMF)
		<b>Cocoa and chocolate products;</b> these include all variety of cocoa and chocolate products, including cocoa-based spreads and cocoa-and nut-based spreads. This category covers products such as cocoa butter, cocoa powder, fat-reduced cocoa powder, powdered chocolate, sweetened cocoa powder, chocolate, milk chocolate, family milk chocolate, white chocolate, filled chocolate and praline.	1.Total viable count (TVC) 2. Enterobacteriaceae	1. Moisture content 2. Total cocoa solids ( for cocoa-based products)
13	<b>Confectionery</b>	<b>Other confectionery;</b> this group includes breath freshening micro-sweets and chewing gum. It covers candies or sweets, other than products described in food category12. It involves all types of products that primarily contain sugar or not and may or may not	1. Aerobic Plate Count	1. Moisture content 2. Acid insoluble ash 3. Heavy metal: Lead (Pb)

		contain cocoa; such as lollies, gelatin/fruit gums, toffees, nougats,		
		<b>Dry and powdered spices, herbs, and condiments;</b> herbs such as aromatic and dried herbs and flowers used as spices, etc.; and spices such as buds, seeds, fruit, root and rhizome spices, etc);	1. Total viable count (TVC) 2. <i>Escherichia coli</i> 3. <i>Salmonella</i> spp.	1. Moisture content 2. Acid insoluble ash
13	<b>Spices and condiments</b>	<b>Paste or Liquid Spices, Herbs and Condiments;</b> Condiments, sauces and relishes such as soy sauce, seasoning mixes, bouillon tubes, bouillon powders, flavour extracts, vinegars, salsas, pesto, chutneys, etc.	1. Total viable count (TVC) 2. Enterobacteriaceae 3. <i>Clostridium perfringens</i>	1. Total insoluble ash
		<b>Beers</b>	1. Total coliforms	1. Ethyl alcohol content %, v/v 2. pH 3. Carbon dioxide, %, v/v
14	<b>Alcoholic Beverages</b>	<b>Wines</b> including still table wine, sparkling wine and fortified wine	1. Total viable count (TVC) (for wines with alcohol content below 10% v/v)	1. Ethyl alcohol content %,v/v 2. Methanol for locally made mines 3. Total Sulphur dioxide 4. Total sugar as invert sugar
		- <b>Banana based alcoholic beverages;</b> - <b>Urwagwa and related products,</b> such as Inkangaza and Butunda; - <b>Malted sorghum,</b> such as Ikigage, Inturire, and similar products of other cereals;	1. TVC 2. <i>Escherichia coli</i> 3. <i>Salmonella</i> spp. 4. <i>Staphylococcus aureus</i>	1. Ethyl alcohol content %, v/v 2. Methanol content 3. Total sugar as invert sugar 4. pH 5. Total suspended solids
		<b>Plant flavoured alcoholic beverages</b>		
		<b>Distilled alcohol beverages;</b> - including Liquors, Gin, Vodka, Rum, Whisky, Brandy, Cognac, Tequila,	NA	1. Ethanol content 2. Methanol content 3. Aldehydes as acetaldehyde

		portable spirits, unsweetened spirits, mixed drinks such as cocktails, punch, sangria, Liqueur (alcoholic product made by mixing or sweetening ingredients within any spirit with for instance cream, milk or milk products, fruit, wine, herbs and eggs), portable spirits, etc.		4. Higher alcohols as amyl alcohols 5. Total esters as ethyl acetate
		<b>Neutral spirits</b>	NA	1. Ethanol content 2. Methanol content 3. Volatile acidity 4. Higher alcohols content 5. Aldehydes as acetaldehyde 6. Heavy metals : Lead (Pb)
		<b>Drinking water;</b> including bottled mineral water, carbonated water, flavoured water and fortified water.	1. Total viable count (TVC) 2. <i>Escherichia coli</i> 3. <i>Salmonella</i> spp.	1. Turbidity 2. pH 3. Free residue chlorine 4. Total dissolved solids/ conductivity 5. Heavy metals: Lead (Pb)
15	<b>Non-alcoholic beverages</b>	<b>Soft drinks without caffeine;</b> including carbonated soft drinks, flavoured water, water-based-flavoured drinks, flavoured soft drinks, soft drinks with fruit content below 25% and other soft drinks such as functional drinks and drink mixes, etc.	1. <i>Escherichia coli</i> 2. <i>Salmonella</i> spp. 4. Yeast and moulds	1. Brix in sugar sweetened carbonated soft drinks 2. Alcohol content, for plant flavoured and carbonated products 3. Sucrose 4. Volume of carbonation for carbonated drinks 5. pH
		<b>Non-alcoholic carbonated drinks with Caffeine;</b> including Energy Drinks, Electrolyte Drinks, etc.	1. <i>Escherichia coli</i>	1. Caffeine 2. Brix 3. Reducing sugar



			<ul style="list-style-type: none"> <li>4. Carbon dioxide for carbonated drinks</li> <li>5. Heavy metals: Lead (Pb)</li> </ul>
	<p><b>Fruit and vegetable drinks;</b> drinks that consist of 25–100% fruit or vegetable juice, such as juices that do not contain any ingredients other than the named source; fruit nectars (with minimum 25– 50% fruit), smoothies and fruit or vegetable juice concentrates, extracts, and powders</p>	<ul style="list-style-type: none"> <li>1. <i>Escherichia coli</i></li> <li>2. Yeast and moulds</li> </ul>	<ul style="list-style-type: none"> <li>1. Brix at 20°C in sugar sweetened carbonated soft drinks</li> <li>2. Ethanol content</li> <li>3. Sucrose</li> </ul>
	<p><b>Coffee, Tea, herbal tea, cocoa, and hot cereal-based beverages;</b> including instant teas and infusions as well as powders based on teas, infusions and cocoa.</p>	<ul style="list-style-type: none"> <li>1. Yeast and moulds</li> <li>2. Total viable count (TVC)</li> </ul>	<ul style="list-style-type: none"> <li>1. Moisture content</li> <li>2. Heavy metals: Lead (Pb)</li> </ul>
	<p><b>Infant Formula, Infant Formula for special medical purposes, and Follow up formula.</b></p>	<ul style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Salmonella</i> spp.</li> <li>3. Enterobacteriaceae</li> <li>4. <i>Enterobacter sakazakii</i> (<i>Cronobacter</i> spp.)</li> </ul>	<ul style="list-style-type: none"> <li>1. Vitamins: Vitamin A, Vitamin D3 (Cholecalciferol), Vitamin C (Ascorbic acid), Vitamin B1 (Thiamine), Vitamin B2 (Riboflavin), Vitamin B3 (Niacin), Vitamin B6 (pyridoxine), Vitamin B9 (Folic acid), Vitamin B5 (Pantothenic acid), Vitamin B12 (Cyanocobalamine), Vitamin K1, Vitamin H (Biotin), Vitamin E (<math>\alpha</math>-tocopherol)</li> <li>2. Minerals: Sodium, Potassium, Chloride, Calcium, Phosphorus, Magnesium, Iron, Iodine, Copper, Zinc, Manganese, Chlorine</li> <li>3. Selenium (for infant formula for</li> </ul>

				<ul style="list-style-type: none"> <li>special medical purposes)</li> <li>4. Fluoride</li> <li>5. L-carnitine</li> <li>6. Myo-inositol</li> <li>7. Energy</li> <li>8. Protein content (cows' milk, soy isolate)</li> <li>9. Carbohydrates</li> <li>10. Lipid content</li> <li>11. Lauric and myristic acids</li> <li>12. Trans fatty acids</li> <li>13. Aflatoxin M1</li> <li>14. Heavy metals: Lead, Chromium (for infant formula for special medical purposes), Molybdenum (for infant formula for special medical purposes)</li> <li>15. Melamine (powdered, liquid)</li> <li>16. Moisture content (powdered)</li> <li>17. Taurine ( if added)</li> <li>18. DHA ( if added)</li> <li>19. Residues of antibiotics</li> <li>20. Dioxin</li> </ul>
16	<b>Foods for Particular Nutritional Uses</b>	<b>Fortified and non-fortified processed cereal-based food</b>	<ol style="list-style-type: none"> <li>1. Total viable count (TVC)</li> <li>2. <i>Coliforms</i></li> <li>3. <i>Escherichia coli</i></li> <li>4. <i>Salmonella</i> spp.</li> <li>5. <i>Staphylococcus aureus</i></li> <li>6. <i>Bacillus cereus</i></li> <li>7. Yeasts and moulds</li> </ol>	<ol style="list-style-type: none"> <li>1. Moisture content</li> <li>2. Vitamins and minerals ( if added)</li> <li>3. Energy density</li> <li>4. Protein content</li> <li>5. Fat content</li> <li>6. Total aflatoxins</li> <li>7. Aflatoxin B1</li> </ol>

			8. <i>Clostridium Botulinum</i> (if the product contains honey or maple syrup)	8. Fumonisin 9. Ochratoxin A 10. Heavy metals: Lead (Pb)
		<b>Foods for weight reduction;</b> Foods for weight reduction including total daily diet and single meal replacements for weight reduction	1. <i>Coliforms</i> 2. <i>Escherichia coli</i> 3. <i>Salmonella spp.</i> 4. <i>Staphylococcus aureus</i> 5. <i>Bacillus cereus</i>	1. Energy content 2. Total protein content 3. Total fat 4. Linoleic acid, in the form of glycerides 5. Dietary fiber content 6. Vitamins: Vitamin A, Vitamin D, Vitamin C (Ascorbic acid), Vitamin E; Vitamin B1 (Thiamine), Vitamin B3 (Niacin), Riboflavin, Vitamin B6, Folic acid, Vitamin B12; 7. Minerals: Calcium, Phosphorus, Iron, Iodine, Magnesium, Copper, Potassium, Zinc, Sodium, 8. Carbohydrates
		<b>Soups</b> (Including dehydrated soup, canned and bottled soups, and broths)	1. Total viable count (TVC) 2. <i>Escherichia coli</i> 3. <i>Salmonella spp.</i> 4. <i>Clostridium Botulinum</i> (for canned products)	1. Moisture content (if dehydrated) 2. Acid insoluble Ash 3. Sodium chloride
17	<b>Composite dishes</b>	<b>Different composite products with different ingredients</b>	1. Total viable count (TVC) 2. <i>Escherichia coli</i>	1. Moisture content, 2. Heavy metals: Lead (Pb)
18	<b>Savory snacks</b>	<b>Crisps, curls and other snacks;</b> Fried or baked savoury chips prepared from tubers or cereals, such as potato chips or	1. Total viable count (TVC) 2. <i>Escherichia coli</i> 3. Yeast and moulds	1. Moisture content 2. Peroxide value 3. Heavy metals: Lead, Cadmium

		corn chips; or other savoury snacks prepared from tubers or cereals.		
19	<b>Food Additives</b>	<b>Different types of food additives</b>	1. Total viable count (TVC) 2. Yeast and moulds	1. Heavy metals (Pb) 2. Iodine for food grade salt

FOR PUBLIC REVIEW