



FOOD SAFETY PRODUCT SPECIFICATION GUIDELINES - WM Int



FAMILIES	SUB CATEGORY	EXAMPLE	PARAMETERS				
			MICROBIOLOGICAL	Acceptance Limit	PHYSICAL AND CHEMICAL	Acceptance Limit	
Dairy	Natural Cheeses	Colby, Muenster, Swiss, Cheddar, Mozzarella, Provolone, Pepper Jack, Monterey Jack	e-coli Listeria Monocytogenes Mold Yeast Salmonella sp. Staphilococcus Aureus Total Coliforms	< 10 CFU/g Absence < 1000 CFU/g < 1000 CFU/g Absence < 100 CFU/g < 100 CFU/g	% Moisture % Fat % Protein pH	According to product According to product According to product According to product	
	Refrigerated Processed Cheese	American Cheese, Processed Block Cheese Substitutes and Analogues	Aerobic Plate Count e-coli Listeria Monocytogenes Mold Yeast Salmonella sp. Staphilococcus Aureus Total Coliforms	< 1000 CFU/g < 10 CFU/g Absence < 100 CFU/g < 100 CFU/g Absence < 100 CFU/g < 100 CFU/g	% Moisture % Fat % Protein pH	According to product According to product According to product According to product	
	Mature Cheeses (Refrigerated and stable at room temperature)	Parmesan - Romano - Gruyere - Manchengo - Gouda	e-coli Listeria Monocytogenes Mold Yeast Salmonella sp. Staphilococcus Aureus Total Coliforms	< 10 CFU/g Absence < 500 CFU/g < 10 000 CFU/g Absence < 100 CFU/g < 100 CFU/g	% Moisture % Fat % Protein pH	According to product According to product According to product According to product	
	Ice Cream	Sherbet Ice Cream - Milk based ice cream - Ice cream with fillings and toppings - Ice cream with toppings	Aerobic Plate Count e-coli Listeria Monocytogenes Mold Yeast Salmonella sp. Staphilococcus Aureus	< 50 000 CFU/g < 10 CFU/g Absence < 100 CFU/g < 100 CFU/g Absence < 100 CFU/g	% Fat % Solids pH Acidity % Overrun	According to product According to product According to product According to product	
	Whipped Cream	Whipped Cream Spray	Aerobic Plate Count e-coli Listeria Monocytogenes Mold Yeast Salmonella sp. Staphilococcus Aureus Total Coliforms	< 250 000 CFU/g < 10 CFU/g Absence < 1000 CFU/g < 1000 CFU/g Absence < 100 CFU/g < 100 CFU/g	% Moisture Milk Fat Content Maximum content of non-fat solids of milk Pesticides and Veterinary Drugs	According to product According to product According to product According to legislation	
Meats and Sausages	Cured Sausages	Salami - Peperoni - Prosciutto - Serrano ham	Aerobic Plate Count e-coli Mold Yeast Total Coliforms Salmonella sp. Listeria Monocytogenes Staphilococcus Aureus Clostrium Perfringens	< 100 000 CFU/g < 10 CFU/g < 100 CFU/g < 100 CFU/g < 100 CFU/g Absence Absence < 100 CFU/g < 100 CFU/g	% Fat % Protein % Moisture % Salt Aw pH Nitrites (ppm)	According to product According to product According to product According to product According to product According to product According to legislation	
	Cooked sausages	Ham - Sausages - Mortadella - Salchichón - Smoked ham	Aerobic Plate Count e-coli Lactic acid bacteria Mold Yeast Total Coliforms Salmonella sp. Listeria Monocytogenes Staphilococcus Aureus Clostrium Perfringens	< 10 000 CFU/g < 10 CFU/g < 10 000 CFU/g < 100 CFU/g < 100 CFU/g < 100 CFU/g Absence Absence < 100 CFU/g < 100 CFU/g	% Fat % Protein % Moisture % Salt Aw pH Nitrites (ppm)	According to product According to product According to product According to product According to product According to product According to legislation	
	Raw Sausages	Chorizo - Bacon - Ground chicken, turkey and pork	Aerobic Plate Count e-coli Total Coliforms Salmonella sp. Staphilococcus Aureus Lactic acid bacteria	< 100 000 CFU/g < 100 CFU/g < 1000 CFU/g Absence < 100 CFU/g < 1000 CFU/g	% Fat % Protein % Water % Salt Aw pH Nitrites (ppm)	According to product According to product According to product According to product According to product According to product According to legislation	
	Raw Ground Meats (Poultry and Pig)	<i>*Applies only for sausages</i>					
	Refrigerated or frozen fully cooked meats	Cooked beef cakes - Meatballs - Cooked pork products	Aerobic Plate Count e-coli E. coli O157:H7 Lactic acid bacteria Salmonella sp. Listeria Monocytogenes Staphilococcus Aureus Total Coliforms Mold Yeast Clostrium Perfringens	< 10 000 CFU/g < 10 CFU/g Absence < 100 CFU/g Absence Absence < 100 CFU/g < 100 CFU/g < 100 CFU/g < 100 CFU/g < 100 CFU/g	% Fat % Protein % Water % Salt Aw pH	According to product According to product According to product According to product According to product According to product	
	Cooked Chicken (Breaded and Unbreaded)	Frozen breaded and unbreaded Chicken, fully cooked (chicken nuggets, filets, empanadas, grilled strips and offers)	Aerobic Plate Count e-coli Listeria Monocytogenes Salmonella sp. Staphilococcus Aureus Total Coliforms Mold Yeast Clostrium Perfringens	< 10 000 CFU/g < 10 CFU/g Absence Absence < 10 CFU/g < 10 CFU/g < 100 CFU/g < 100 CFU/g	% Fat % Protein % Water % Salt Aw pH	According to product According to product According to product According to product According to product According to product	
	Raw Beef and Pork (Fresh and Frozen)	Fresh or Frozen Beef, Carcass or pieces: Steaks, Roasts, Ribs, Philly Steak Pucks, Liver and other beef innards	Aerobic Plate Count e-coli e-coli O157:H7 Salmonella Staphilococcus Aureus Listeria monocytogenes Campylobacter spp. Clostridium botulinum Clostridium perfringens Yersinia enterocolitica Parasites	≤ 500,000 CFU/g ≤ 10 CFU/g Absence Absence < 100 CFU/g Absence Absence Absence Absence Absence	Antibiotics	According to product	

	Raw Poultry and Turkey (Fresh and Frozen)	Fresh & Frozen Raw Poultry, Chicken and Turkey Parts, and Whole Birds	Aerobic Plate Count Campylobacter e-coli Salmonella Staphylococcus Aureus Listeria monocytogenes	≤ 500,000 CFU/g Absence ≤ 100 CFU/g Absence ≤ 100 CFU/g Absence		
Seafood	Breaded & Value-Added Fish	Breaded or Battered Fish Fillets (i.e. Cod, Catfish, Flounder, Haddock, Sole, Tilapia, Trout, Whiting, etc.), Breaded or Battered Fish Sticks, Value-Added Fish Products (i.e. Lemon Pepper Tilapia, Teriyaki Salmon, etc.)	Listeria Monocytogenes Salmonella sp. Staphylococcus Aureus	Absence Absence ≤ 100 CFU/g	Fluoroquinolones Gentian Violet Malachite Melamine Nitrofurans Oxytetracycline Sulfadiazine Tetracyclines Trimethoprim	According to product Negative According to product According to product Negative Negative According to product Negative
	Raw Fish, Shrimp & Crustaceans, Molluscan Shellfish (Fresh or Frozen)	Raw Fish Fillets (i.e. Catfish, Cod, Flounder, Haddock, Mahi Mahi, Salmon, Swai, Tilapia, Trout, Tuna, Whiting, etc.), Shrimp, Crab, Crab Legs, Lobster, Lobster Tails, Oysters, Mussels, Clams, Squid	e-coli Salmonella Vibrio spp Staphylococcus aureus Shigella spp Hepatitis A Norovirus	≤ 10 CFU/g Absence Absence ≤ 100 CFU/g Absence Absence Absence	Chloramphenicol Fluoroquinolones Gentian Violet Histamine Malachite Green Methyl Mercury Nitrofurans Oxytetracycline Sulfadiazine Tetracyclines Trimethoprim	According to product According to product Negative According to product According to product According to product Negative Negative According to product Negative
Fats	Margarine or Butter Substitutes	Butter (Salted, Unsalted, Whipped), Light Butter, Margarine	Aerobic Plate Count E. coli (generic) Listeria monocytogenes Mold Salmonella Staphylococci Total Coliforms Yeast	< 2000 CFU/g ≤ 10 CFU/g Absence ≤ 10 CFU/g Absence ≤ 10 CFU/g ≤ 10 CFU/g ≤ 10 CFU/g	Fat peroxide % Fat Acidity Iodine Index Melting point °C % Humidity % Fat	According to product According to product According to product According to product According to product According to product
Produce	Frozen Fruit	Frozen fruits	Aerobic Plate Count e-coli Listeria Monocytogenes / 25g Mold Yeast Salmonella sp./ 25g Total Coliforms	< 10 000 CFU/g < 10 CFU/g ó < 3 MPN/g Absence < 1000 CFU/g < 1000 CFU/g Absence < 10 CFU/g	*Brix *Heavy metals	According to product According to CODEX CXS-193-1995 (2019).
	Frozen Vegetables	Frozen vegetables, value-added frozen vegetables (with butter, herbs, cheese, etc)	Aerobic Plate Count e-coli Listeria Monocytogenes / 25g Mold Yeast Salmonella sp./ 25g Total Coliforms	< 50 000 CFU/g < 10 CFU/g ó < 3 MPN/g Absence < 100 CFU/g < 100 CFU/g Absence < 200 CFU/g	*Heavy metals	According to CODEX CXS-193-1995 (2019).
	Frozen Potato Fries	Frozen potatoes (Crinkle Cut, Puffs, French Fries, Hash Browns, Tater Tots, etc)	Aerobic Plate Count e-coli Listeria Monocytogenes Mold Yeast Salmonella sp. Total Coliforms	< 10 000 CFU/g < 10 CFU/g Absence < 100 CFU/g < 100 CFU/g Absence < 10 CFU/g	*Heavy metals	According to CODEX CXS-193-1995 (2019).
	Raw, Whole Fruits	Raw, Fresh, Whole Fruits	e-coli e-coli O157:H7 Listeria Monocytogenes Salmonella Total Coliforms	≤ 100 CFU/g Absence Absence Absence ≤ 1000 CFU/g	Pesticide Multi-Residue Screen	According to product
	Raw, Whole Vegetables	Raw, Fresh, Whole Vegetables	e-coli e-coli O157:H7 Listeria Monocytogenes Salmonella Shigella spp Parasites Clostridium botulinum	≤ 10 CFU/g Absence Absence Absence Absence No parasites observed ≤ 10 CFU/g	Pesticide Multi-Residue Screen	According to product
	Fresh-Cut Vegetables (Non-Leafy Greens)	Fresh-Cut, Raw Vegetables, Sliced Tomatoes, Vegetable Trays, Sliced/Diced Onions, Snow Peas, Green Beans, Broccoli, Florets, Cauliflower Florets, Butternut Squash	Aerobic Plate Count e-coli e-coli O157:H7 Listeria Monocytogenes Salmonella Shigella spp Parasites Clostridium botulinum	≤ 100,000 CFU/g ≤ 10 CFU/g Absence Absence Absence Absence No parasites observed ≤ 10 CFU/g	Pesticide Multi-Residue Screen	According to product
	Fresh-Cut Vegetables (Leafy Greens)	Bagged Salads, Coleslaw Mixes and Spinach Containing any of the Following Ingredients: Iceberg Lettuce, Romaine Lettuce, Green Leaf Lettuce, Red Leaf Lettuce, Butter Lettuce, Baby Leaf Lettuce (i.e. Immature Lettuce or Leafy Greens), Spinach, Cabbage (Red & Green), Savoy Cabbage, Spring Mix, Collard Greens, Mustard Greens, Turnip Greens, Endive, Escarole, Kale, Arugula, Chard, Fresh Herbs & Cilantro, Loose Leaf Lettuce Packs	Aerobic Plate Count e-coli e-coli O157:H7 Listeria Monocytogenes Salmonella Total Coliforms Shigella spp Parasites Clostridium botulinum	≤ 100,000 CFU/g ≤ 10 CFU/g Absence Absence Absence ≤ 1000 CFU/g Absence No parasites observed ≤ 10 CFU/g	Pesticide Multi-Residue Screen	According to product
	Fresh-Cut Fruit	Fresh Fruit Trays, Sliced Pineapple Spears, Apple Wedges, Fresh-Cut Melon (Watermelon, Cantaloupe, etc.), Fresh Cut Pears	Aerobic Plate Count e-coli Listeria Monocytogenes Mold Yeast Salmonella Total Coliforms Shigella spp Parasites Clostridium botulinum	≤ 200,000 CFU/g ≤ 10 CFU/g Absence ≤ 1000 CFU/g ≤ 1000 CFU/g Absence ≤ 1000 CFU/g Absence No parasites observed ≤ 10 CFU/g		

Frozen Pasta	Not Ready-to-Eat Pasta with Meat Meat lasagna, Spaghetti with meatballs or meat sauce, Raviolis with beef or chicken, etc	Aerobic Plate Count < 10 000 CFU/g e-coli < 10 CFU/g e-coli O157:H7/25g Absence Listeria Monocytogenes/25g Absence Salmonella sp./25g Absence Staphilococcus Aureus < 100 CFU/g Total Coliforms < 100 CFU/g Mold < 100 CFU/g Yeast < 100 CFU/g Clostridium Perfringens < 100 CFU/g	% Moisture % Protein % Fat pH	According to product According to product According to product According to product
	Pasta Not Ready to Eat without Meat Vegetables lasagna, Spaghetti with marinara sauce, Pasta with cheese, Ravioli with cheese, Pasta Alfredo, etc	Aerobic Plate Count < 10 000 CFU/g e-coli < 10 CFU/g Listeria Monocytogenes/25g Absence Salmonella sp./25g Absence Staphilococcus Aureus < 100 CFU/g Total Coliforms < 100 CFU/g Mold < 100 CFU/g Yeast < 100 CFU/g	% Moisture % Protein % Fat pH	According to product According to product According to product According to product
Approved by: <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  Irene Rosales Food Safety Regional Manager </div> <div style="text-align: center;">  Ronald Azofeifa Deputy Director Quality and Safety </div> </div>				