# Preservation of Meat and Poultry Products (Preservation Techniques, Luncheon Meats, Meat Loaves, Meat Spreads, Canned Meat Products, Maintenance of Eggs, Soups, Gravies, Sauces, Sausage with Machinery, Equipment Details & Factory Layout) 2nd Edition

Author: - NIIR Board of Consultants &

**Engineers** 

Format: paperback

Code: NI158 Pages: 504

Price: Rs.1575US\$ 150

Publisher: NIIR PROJECT CONSULTANCY

**SERVICES** 

Usually ships within 5 days

Food preservation is a method of maintaining foods at a desired level of properties or nature for their maximum benefits. Preservation usually involves preventing the growth of bacteria, yeasts, fungi, and other micro-organisms (although some methods work by introducing bacteria, or fungi to the food), as well as retarding the oxidation of fats which cause rancidity. There are various methods of preservation chilling, freezing, curing, smoking, dehydration, canning, radiation preservation etc. Chilling is most widely used method for preservation for short term storage of meat because chilling or refrigeration slows down the microbial growth and enzymatic as well as chemical reactions. Freezing is the method of choice for the long term preservation of meat. It has advantage of retaining most of the nutritive value of meat during storage. Meat smoking was known to man as an aid in preservation for a long time. Smoke contains a large number of wood degradation products such as aldehydes, ketones, organic acids, and phenols etc. which exert bacteriostatic affect besides imparting characteristic smoky flavour. Canning is a process of preservation achieved by thermal sterilization of product held in hermetically sealed containers. Canning preserves the sensory attributes such as appearance, flavour and texture of the meat products to a large extent. Freeze drying of meat is a satisfactory process of dehydration preservation due to better reconstitution properties, nutritive quality and acceptability. It involves the removal of water from the frozen state to vapour state by keeping it under vacuum and giving a low heat treatment. Maintaining or creating nutritional value, texture and flavour is an important aspect of food preservation, although, historically, some methods drastically altered the character of the food being preserved. Meat and poultry products are chilled immediately after slaughter to acceptable internal temperatures which insure the prompt removal of the animal heat and preserve the wholesomeness of the products. As such, due to the recent up gradation of preservation techniques, the preservation industry is also growing almost at the same rate as the food industry which is about 10 to 12% per year. Some of the major aspects of the book are principles of various preservation techniques, standards and quality control measures for meat, meat food products order, eating quality and sensory evaluation of meat, preservation of poultry meat, utilisation of poultry industry by products, mixed poultry by products meal, structure, composition and nutritive value of eggs, luncheon meats, meat loaves, and meat spreads, barbecue style pork loaf using non fat dry

milk, canned corned beef products, salisbury steak with textured vegetable protein, general instruction to be observed for processing canned items under sterm or under the combination of stream and water pressure, spaghetti and meat balls in tomato sauce with cheese, etc. Different preservation techniques are being developed to satisfy current demands of economic preservation and consumer satisfaction in nutritional and sensory aspects, convenience, absence of preservatives, low demand of energy and environmental safety. The present book contains various processes of meat and poultry preservation. All the entrepreneurs, technocrats, persons evolved in meat and poultry processing will be benefited from this book.

# 1. PRINCIPLES OF VARIOUS PRESERVATION TECHNIQUES

- 1.1 Chilling/Refrigeration
- 1.2 Freezing
- 1.3 Curing
- 1.3.1 Sodium Nitrates and Nitrite
- 1.4 Smoking
- 1.5 Thermal Processing
- 1.6 Canning
- 1.6.1 Preparation of Meat and Gravy
- 1.6.2 Precooking
- 1.6.3 Filling
- 1.6.4 Exhausting
- 1.6.5 Seaming
- 1.6.6 Retorting or Thermal Processing
- 1.6.7 Cooling
- 1.6.8 Storage
- 1.7 Dehydration
- 1.8 Irradiation
- 2. HOW TO START A MEAT AND POULTRY PRODUCTS BUSINESS
- 2.1 Research and Market Analysis
- 2.2 Business Planning
- 2.3 Legalities
- 2.4 Location
- 2.5 Supplier and Equipment
- 2.6 Quality Control
- 2.7 Branding and Marketing
- 2.8 Pricing
- 2.9 Employee Training
- 2.10 Customer Service
- 2.11 Diversification
- 2.12 Environmental Considerations
- 3. PRESERVATION OF POULTRY MEAT
- 3.1 Chilling
- 3.2 Freezing
- 3.3 Curing
- 3.4 Smoking
- 3.5 Dehydration
- 3.6 Canning
- 3.7 Radiation Preservation
- 4. UTILISATION OF POULTRY INDUSTRY BY-PRODUCTS
- 4.1 Feathers
- 4.2 Blood
- 4.3 Offal

- 4.4 Mixed Poultry By-products Meal 4.5 Hatchery Waste
- 4.6 Poultry Manure
- 5. PRESERVATION AND MAINTENANCE OF EGGS
- 5.1 Egg Cleaning
- 5.2 Oil Treatment
- 5.3 Cold Storage
- 5.4 Thermo-Stabilisation
- 5.5 Immersion in Liquids
- 6. POULTRY PRODUCTS
- 6.1 Freezing Whole, Parts, Rolls, and Meat of Poultry
- 6.2 Freezing Roasting Chickens and Turkeys
- 6.2.1 Chickens
- 6.2.2 Turkeys
- 6.3 Freezing Poultry Rolls (Raw, Cooked, Cured and Smoked)
- 6.3.1 Raw Poultry Rolls
- 6.3.2 Cooked Poultry Rolls
- 6.3.3 Cured, Smoked Poultry Rolls
- 6.4 Freezing Cut-up Poultry
- 6.5 Frozen Deboned Chicken Meat
- 6.6 Freeze Drying Chicken
- 6.7 Freezing Stuffed Turkeys
- 6.8 Boning Whole Turkeys
- 6.9 Freezing Whole Boned Turkey Rolls
- 6.10 Turkey Fillets
- 6.11 How to Utilize Poultry Skin and Meat Bits in Pot Pies
- 6.12 Freezing Cornish Game Hens
- 6.13 Freezing Ducks
- 6.14 Freezing Geese
- 6.15 Canned Chicken Products
- 6.15.1 Canned Whole Chicken
- 6.15.2 Ingredients for Plain Broth
- 6.15.3 Procedure
- 6.15.3.1 For Plain Broth
- 6.15.3.2 For Broth with Gelatin Added
- 6.15.4 Fill Cans
- 6.15.5 Suggested Process
- 6.15.6 Chill
- 6.16 Canned Chicken or Turkey Meat
- 6.16.1 Suggested Process
- 6.17 Canned Chicken Fricasse
- 6.17.1 Prepare Chicken
- 6.17.2 Prepare Gravy
- 6.17.3 Fill Cans and Close
- 6.17.4 Suggested Process
- 6.18 Canned Chicken Stew
- 6.18.1 Prepare Vegetables
- 6.18.2 Prepare 90 Gal. of Gravy
- 6.18.3 Fill and Close Cans
- 6.18.4 Suggested Process
- 6.19 Canned Chicken and Dumplings
- 6.19.1 Prepare Chicken

- 6.19.2 Prepare Dumplings
- 6.19.3 Prepare Gravy
- 6.19.4 Suggested Process
- 6.20 Canned Turkey and Dumplings
- 6.20.1 Canned Ham and Dumplings
- 6.21 Canned Chicken and Noodle Dinner
- 6.21.1 Suggested Process
- 6.22 Canned Chicken Noodle Dinner
- 6.22.1 Procedure
- 6.22.2 Suggested Process
- 6.23 Canned Chicken, Mushrooms and Noodles
- 6.23.1 Procedure
- 6.23.2 Suggested Process
- 6.24 Canned Chicken, Mushroom and Macaroni
- 6.24.1 Procedure
- 6.24.2 Suggested Process
- 6.25 Canned Giblet and Noodle Dinner
- 6.25.1 Prepare Giblets
- 6.25.2 Prepare Noodles
- 6.25.3 Prepare Stock
- 6.25.4 Fill Jars and Close
- 6.25.5 Suggested Process
- 6.26 Canned Chicken a La King (Finest Quality)
- 6.26.1 Prepare a la King Ingredients
- 6.26.2 Prepare Sauce
- 6.26.3 Assemble Ingredients and Pack
- 6.26.4 Suggested Process
- 6.26.5 Variations
- 6.27 Canned Chicken a La King (Good Quality)
- 6.27.1 Prepare a la King Ingredients
- 6.27.2 Prepare Sauce
- 6.27.3 Assemble Ingredients and Pack
- 6.27.4 Suggested Process
- 6.28 Canned Chicken Chow Mein
- 6.28.1 Prepare Chicken Dice
- 6.28.2 Prepare Vegetables
- 6.28.3 Prepare Sauce
- 6.28.4 Fill into Cans
- 6.28.5 Suggested Process
- 6.29 Canned Curried Chicken
- 6.29.1 Prepare Chicken Meat
- 6.29.2 Prepare Gravy
- 6.29.3 Suggested Process
- 6.30 Canned Chicken in Barbecue Sauce
- 6.30.1 Procedure
- 6.30.2 Suggested Process
- 6.31 Canned Hungrian-Style Chicken Paprika
- 6.31.1 Prepare Chicken
- 6.31.2 Prepare Gravy
- 6.31.3 Fill and Close Cans
- 6.31.4 Suggested Process
- 6.32 Canned Chicken Liver Pate
- 6.32.1 Procedure

- 6.33 Canned Potted Chicken (Sandwich Spread)
- 6.33.1 Procedure
- 6.33.2 Uses for Broth
- 6.34 Canned Savory Chicken or Turkey Spread
- 6.34.1 Procedure
- 6.34.2 Suggested Process
- 6.35 Canned Giblet Spread
- 6.35.1 Procedure
- 6.35.2 Suggested Process
- 6.36 Frozen Chicken Products
- 6.36.1 Frozen Baked Dressing
- 6.36.2 Procedure
- 6.36.3 Frozen Giblet Dressing
- 6.37 Frozen Chicken Pot Pie Filing
- 6.37.1 Procedure
- 6.37.2 To Use Frozen Product
- 6.38 Frozen Chicken or Turkey Pot Pies
- 6.38.1 Procedure
- 6.38.1 Make Emulsions
- 6.38.1 Make Gravy and Assemble
- 6.39 Frozen Chicken or Turkey Croquettes
- 6.39.1 Procedure
- 6.40 Frozen Chicken or Turkey Patties
- 6.40.1 Procedure
- 6.41 Frozen Breaded Chicken Sticks
- 6.41.1 Prepare Chicken Sticks
- 6.41.2 For Batter Coating
- 6.41.3 For Breading
- 6.42 Package and Freeze
- 6.43 Frozen Chicken a La King
- 6.43.1 Prepare Sauce
- 6.44 Frozen Chicken a La King
- 6.44.1 Procedure
- 6.45 Frozen Creamed Chicken Patty Filling
- 6.45.1 Procedure
- 6.46 Frozen Chicken in Port Wine
- 6.46.1 Procedure
- 6.47 Frozen Chicken Curry
- 6.47.1 Procedure
- 6.48 Frozen Chicken Tahiti
- 6.48.1 Procedure
- 6.49 Frozen Chicken Paprika
- 6.49.1 Procedure
- 6.50 Frozen Chicken Cacciatore
- 6.50.1 Procedure
- 6.51 Frozen Cornish Game Hen with Peaches
- 6.51.1 Procedure
- 6.52 Frozen French-Fried Chicken
- 6.53 Boil-in-Bag Frozen Smoked Chicken in Barbecue Sauce
- 6.53.1 Prepare Chicken and Smoke
- 6.53.2 Prepare Sauce
- 6.53.3 Pack and Freeze
- 6.54 Bag-in-Box Frozen Smoked Chicken in Barbecue Sauce

- 6.54.1 Prepare Chicken and Smoke6.54.2 Prepare Sauce6.54.3 Package and Freeze6.55 Frozen Chicken Burgers6.56 Frozen Turkey Burgers
- 6.57 Frozen Chicken Giblet Con Carne with Beans
- 6.57.1 Prepare Meats
- 6.57.2 Prepare Beans
- 6.57.3 Assemble Ingredients
- 6.58 Turkey Products
- 6.58.1 Frozen Turkey Rolls (Emulsion Type)
- 6.58.2 Procedure for Making Rolls
- 6.59 Canned Turkey Noodle Dinner in Jars
- 6.59.1 Procedure
- 6.60 Canned Turkey a La King
- 6.60.1 Prepare a la King Ingredients
- 6.60.2 Prepare Sauce
- 6.60.3 Suggested Process
- 6.60.4 Label Requirement
- 6.61 Frozen Comminuted Turkey "Steaks"
- 6.61.1 Procedure
- 6.61.1.1 To Make Skin Emulsion
- 6.61.1.2 Assemble Ingredients
- 6.61.1.3 Stuff, Cook, and Chill
- 6.61.1.4 Slice, Coat, and Freeze
- 6.62 Smoked Turkey
- 6.62.1 Procedure
- 6.63 Turkey Loaf
- 6.63.1 Procedure
- 6.64 Turkey Loaf
- 6.64.1 Procedure
- 6.65 Turkey Loaf in Chubs
- 6.65.1 Procedure
- 6.65.1.1 To Make Skin Emulsion
- 6.65.1.2 Assemble Ingredients
- 6.65.1.3 Stuff, Cook, and Chill
- 6.66 Turkey Loaves in 6-Lb Oblong Cans
- 6.66.1 Stuffing, Cooking, Chilling for Oblong Cans
- 6.67 Turkey Patties with Textured Vegetable Protein
- 6.67.1 Procedure
- 6.68 Frozen Turkey Sticks
- 6.68.1 Stuffing, Cooking, Preparing Sticks
- 6.69 Turkey Liverwurst (Pate) in Chubs
- 6.69.1 Procedure
- 6.70 Turkey Spread in Chubs
- 6.70.1 Procedure
- 6.71 Turkey Bologna
- 6.71.1 Procedure
- 6.71.1.1 Stuff and Smoke
- 6.72 Canned Turkey Chili Con Carne
- 6.72.1 Procedure
- 6.72.2 Suggested Process
- 6.73 Canned Turkey Chili Con Carne with Beans

6.73.1 Procedure 6.73.2 Suggested Process 6.73.3 Chill 6.74 Miscellaneous Poultry Products 6.74.1 Cooked Boneless Poultry Rolls and Roasts 6.74.2 Procedure 6.75 Breaded Poultry Patties with 15% Meat Replacement 6.75.1 Procedure 6.76 Chicken Loaf with Textured Vegetable Protein 6.76.1 Procedure 6.77 Jellied Chicken Loaf 6.77.1 Procedure 6.78 Chicken Sandwich Spread 6.78.1 Procedure 6.79 Chicken-Flavoured Sandwich Spread with Textured Vegetable Protein Dice 6.79.1 Procedure 6.80 Chicken Salad with Textured Vegetable Protein 6.80.1 Procedure 6.80.1.1 Variations.—Tuna Salad 6.80.1.2 Turkey Salad 6.81 Chicken Pie with Textured Vegetable Protein 6.81.1 Procedure 6.82 A La King using Textured Vegetable Protein Dice with Chicken-Like Flavour 6.82.1 Procedure 6.83 Chicken a La King with Textured Soy Protein Chiplets 6.83.1 Procedure 6.84 Chicken Liver Pate in Chubs 6.84.1 Procedure 6.85 Base Mix for Chicken Croquettes 6.85.1 Procedure 6.85.1.1 Directions for Sample Evaluation 6.86 Dry Mix Chicken Stew with Vegetables 6.86.1 Procedure 6.87 Chicken Chop Suey with Textured Soy Protein 6.87.1 Procedure

6.88 Chow Mein with Chicken-Flavoured Textured

7. ADVICE FOR POULTRY ENTREPRENEURS: HOW TO PROMOTE

Vegetable Protein Dice

6.89 Smoked Chicken6.89.1 Procedure6.90 Poultry Sausage6.91 Chicken Frankfurters

6.88.1 Procedure

6.91.1 Procedure

YOUR PRODUCT?

7.2 Decision Making

7.1 Research and Analysis

7.3 Implementation of Your Decision7.4 Marketing Tips for Maximize Profit

7.4.1 Marketing Tips 1- Bypass the Middlemen 7.4.2 Get Your Business and Customer Online

7.4.3 Become A Supplier to Restaurants and Hotels

- 7.4.4 Employ A Number of Marketers
- 7.4.5 Offer Attractive Packages and Home Delivery Services
- 8. PLANT LAYOUT DESCRIPTION-POULTRY PROCESSING
- 8.1 Receiving Area
- 8.2 Stunning and Slaughtering
- 8.3 Scalding and Plucking
- 8.4 Evisceration and Inspection
- 8.5 Further Processing
- 8.6 Cooking and Freezing
- 8.7 Packaging
- 8.8 Cold Storage
- 8.9 Dispatch Area
- 8.10 Waste Management Area
- 8.11 Ancillary Areas
- 8.12 Safety and Hygiene
- 9. LUNCHEON MEATS, MEAT LOAVES AND MEAT SPREADS
- 9.1 Introduction
- 9.2 New FDA Ban on Premixed Commercial Seasoning Containing Sodium Nitrite
- 9.3 General Instruction for Processing Canned Items

Under Steam or Under the Combination of Steam and Water Pressure

- 9.4 Processing Steps
- 9.4.1 Exceptions to the Above Rules
- 9.5 Canned Luncheon Meats
- 9.5.1 Finest Quality Spiced Pork Luncheon Meat
- 9.5.1.1 Procedure for All Can Sizes
- 9.5.1.2 Procedure for 12-Oz Oblong Cans
- 9.5.1.3 Procedure for 3- and 6-Lb Oblong Cans
- 9.6 Commercial Quality Spiced Pork Luncheon Meat in
- 3- and 6-LB Cans
- 9.6.1 Procedure
- 9.6.1.1 Can Filling and Closing
- 9.6.1.2 Suggested Process
- 9.7 Chopped Ham in 12-OZ Oblong Cans
- 9.7.1 Procedure
- 9.7.1.1 Can Filling and Closing
- 9.8 Finest Quality Pork or Pork-Beef Luncheon Meat
- 9.8.1 Procedure for All-Pork Product
- 9.8.1.1 Grinding Method
- 9.8.2 Grinding-Chopping Method
- 9.8.2.1 Remix and Stuff
- 9.8.2.2 Cook and Chill
- 9.8.3 Procedure for Pork-Beef Product
- 9.9 Spiced Beef Luncheon Meat In 12 Ozoblong Cans (Commercially Sterile)
- 9.9.1 Procedure
- 9.9.1.1 Suggested Process
- 9.9.1.2 Chilling
- 9.10 New England Pressed Ham in 3- or 6-LB Oblong Cans (Perishable)
- 9.10.1 Procedure
- 9.10.1.1 Remix and Stuff
- 9.10.1.2 Cook and Chill
- 9.11 New England Pressed Ham using Non-Fat Dry Milk
- 9.11.1 Procedure
- 9.12 Commercial Grade Minced Ham in 3- or 6-LB Oblong

# Cans (Perishable) 9.12.1 Procedure 9.12.1.1 Remix and Stuff 9.12.1.2 Suggested Process 9.13 Minced Ham using Non-fat Dry Milk 9.13.1 Procedure 9.14 Cured Beef Tongues in Glass Jars 9.14.1 Preparation of Beef Tongues 9.14.2 Cure 9.14.3 Cook 9.14.4 Skin and Trim 9.14.5 Fill Jars 9.14.6 Process 9.14.7 Suggested Process 9.15 Pickled Pig's Feet or Pork Hocks in Vinegar 9.15.1 Filling 9.15.1.1 Vinegar Solution to Fill Jars 9.15.1.2 Fill Jars to Capacity 9.16 Meat Loaves 9.16.1 Use of Gelatin and Non-fat Dry Milk in Meat Loaves 9.17 Pickle and Pimiento Loaf 9.17.1 Procedure 9.17.1.1 Precaution 9.17.1.2 Grind, Chop, and Mix 9.17.1.3 Stuff and Cook 9.17.1.4 Chill 9.18 Pickle and Pimiento Loaf Using Non-fat Dry Milk 9.18.1 Procedure 9.19 Baked Veal Loaf 9.19.1 Procedure 9.19.1.1 Precaution 9.19.1.2 Grind, Chop, and Mix 9.19.1.3 Pan and Bake 9.20 Veal, Pork, and Liver Loaf using Non-fat Dry Milk 9.20.1 Procedure 9.21 Canned Veal Loaf in 12-OZ Oblong Cans (Commercially Sterile) 9.21.1 Procedure 9.21.2 Pack and Process 9.22 Luxury Loaf using Non-fat Dry Milk 9.22.1 Procedure 9.23 Utility Loaf using Non-fat Dry Milk 9.23.1 Procedure 9.24 Meat and Cheese Loaf using Non-fat Dry Milk 9.24.1 Procedure 9.25 Macaroni, Meat, and Cheese Loaf using Non-fat Dry Milk 9.25.1 Procedure 9.25.1.1 To Bake 9.25.1.2 To Cook 9.26 Baked Pepper Loaf

9.26.1 Procedure

9.26.1.1 Grind, Chop, and Mix 9.26.1.2 Cure and Remix

- 9.26.1.3 Pan and Bake 9.27 Baked Dutch Loaf 9.27.1 Procedure
- 9.27.1.1 Grind, Chop, and Mix
- 9.27.1.2 Pan and Bake
- 9.27.1.3 Chill
- 9.28 Dutch Loaf Using Non-fat Dry Milk
- 9.28.1 Procedure
- 9.29 Liver Loaf (Perishable)
- 9.29.1 Preparation of Product
- 9.29.1.1 Grind and Chop
- 9.29.2 Packing and Processing
- 9.29.2.1 Suggested Process
- 9.30 Liver Loaf
- 9.30.1 Procedure
- 9.30.1.1 Grind and Chop
- 9.30.1.2 Stuff
- 9.30.1.3 Cook
- 9.30.1.4 Chill
- 9.30.1.5 Packaging
- 9.31 Liver Loaf using Non-fat Dry Milk
- 9.31.1 Procedure
- 9.31.2 Coating for Meat Loaves
- 9.32 Deluxe Liver Loaf using Non-fat Dry Milk
- 9.32.1 Procedure
- 9.33 Head-cheese (Brawn)
- 9.33.1 If Pork Skins are Used
- 9.33.2 If Gelatin is Used
- 9.33.3 Procedure
- 9.33.3.1 Cooking
- 9.33.3.2 Cubing and Grinding
- 9.33.3.3 Mixing
- 9.33.3.4 Stuffing
- 9.33.3.5 Cooking
- 9.33.3.6 Chilling
- 9.33.3.7 Smoking
- 9.34 Head Cheese using Non-fat Dry Milk
- 9.34.1 Procedure
- 9.35 Head-Cheese Spices
- 9.36 Souse or Aspic Loaf
- 9.36.1 How to Prepare Gelatin
- 9.36.2 Stuffing
- 9.37 Head-Cheese (Brawn) in 12-OZ Cans (Commercially Sterile)
- 9.37.1 Procedure
- 9.37.2 Suggested Process
- 9.38 Imitation Chicken Loaf in 12-Oz, or 3- Or 6-LB Oblong

### Cans

- 9.38.1 Procedure
- 9.38.1.1 Grind and Mix
- 9.38.2 Suggested Process
- 9.38.3 Chilling 12-Oz Cans
- 9.38.4 Chilling 3- and 6-Lb Cans
- 9.39 Imitation Chicken Loaf in Hoy Molds or 4 x 4 x 24 Inch Oblong Molds

- 9.39.1 Procedure
- 9.39.1.1 Grind and Mix
- 9.39.1.2 Stuff and Cook
- 9.39.1.3 Chill and Package
- 9.40 Imitation Chicken in Aspic in 3- or 6-LB Oblong Cans
- 9.40.1 Procedure
- 9.40.1.1 Pack and Process
- 9.40.2 Suggested Process
- 9.41 Jellied Imitation Chicken Loaf
- 9.41.1 Procedure
- 9.41.1.1 Grind and Mix
- 9.41.1.2 Stuff and Cook
- 9.41.1.3 Chill and Package
- 9.42 Roast Beef Loaf using Non-fat Dry Milk
- 9.42.1 Procedure
- 9.43 Jellied Roast Beef Loaf
- 9.43.1 Procedure
- 9.44 Jellied Corned Beef Loaf
- 9.44.1 To Cook and Cure the Beef
- 9.45 Corned Beef Loaf using Non-Fat Dry Milk
- 9.45.1 Procedure
- 9.46 Jellied Barbecued Beef Loaf
- 9.46.1 Procedure
- 9.46.1.1 Stuff, Chill, and Package
- 9.47 Barbecue-Style Pork Loaf using Non-fat Dry Milk
- 9.47.1 Procedure
- 9.48 Canned Spreads
- 9.48.1 Deviled Ham Spread (Finest Quality)
- 9.48.2 Selection and Curing of Hams
- 9.48.3 Cook Hams
- 9.48.4 Grind and Mix
- 9.48.5 Re-Heat and Fill Cans
- 9.48.6 Suggested Process
- 9.49 Deviled Ham Spread (Commercial Grade)
- 9.49.1 Preparation of Meat
- 9.49.2 Grind and Mix
- 9.49.3 Re-Heat and Fill Cans
- 9.49.4 Suggested Process
- 9.50 Ham and Tongue Spread
- 9.50.1 Cure and Cook Tongues
- 9.50.2 Grind and Chop
- 9.50.3 Re-heat and Fill Cans
- 9.51 Canned Potted Meat (Buffet Spread)
- 9.51.1 Prepare Meats and By-Products
- 9.51.2 Grind and Chop
- 9.51.3 Re-Heat and Fill Cans
- 9.51.4 Suggested Process
- 9.52 Canned Liver Spread
- 9.52.1 Prepare Meat and By-Products
- 9.52.1.1 Pretreat Tripe
- 9.52.1.2 Soak and Leach Livers
- 9.52.1.3 Snouts, Jowls, and Pork Trimmings
- 9.52.2 Grind and Chop

- 9.52.3 Reheat and Fill Cans
- 9.52.4 Suggested Process
- 9.53 Canned Mock Chicken Spread
- 9.53.1 Prepare Meat and By-Products
- 9.53.1.1 Pretreat Tripe
- 9.53.1.2 Snouts and Pork
- 9.53.2 Grind and Chop
- 9.53.3 Reheat and Fill Cans
- 9.53.4 Suggested Process
- 9.54 Mettwurst Sausage Spread
- 9.54.1 Procedure
- 9.54.1.1 Grind
- 9.54.1.2 Cure
- 9.54.1.3 Regrind
- 9.54.1.4 Stuff
- 9.54.1.5 Ripen (Green Room)
- 9.54.1.6 Smoke
- 9.54.2 Fast Curing Method
- 9.55 Teewurst Sausage Spread
- 9.55.1 Procedure
- 9.56 Teewurst Sausage Spread (Fast Method)
- 9.57 Canned Corned Beef Products
- 9.57.1 Canned Corned Beef
- 9.57.2 Suggested Process
- 9.58 Canned Corned Beef Hash
- 9.58.1 Procedure
- 9.58.2 Suggested Process
- 9.59 Corned Beef Hash using Braised Meat
- 9.59.1 Procedure
- 9.59.2 Suggested Process
- 9.60 Corned Beef Hash using South American Canned

# **Corned Beef**

- 9.60.1 Procedure
- 9.60.2 Suggested Process
- 9.61 Deviled Corned Beef (Hot Pack)
- 9.61.1 Procedure
- 9.61.1.1 Deviling Procedure
- 9.61.2 Suggested Process
- 9.62 Creamed Corned Beef (Hot Pack)
- 9.62.1 Procedure
- 9.62.2 Suggested Process
- 10. HOW TO LAUNCH A PROFITABLE MEAT BUSINESS IN INDIA
- 10.1 Create a Perfect Business Plan
- 10.2 Manage Finances
- 10.3 How Can I Contact the Clients?
- 10.4 Space Required to Begin Meat Processing
- 10.5 Registration and Licence
- 10.6 List of Raw Materials for Meat Processing
- 10.7 Processing of Meat
- 10.8 List of the Machinery Needed for Meat Plant
- 10.9 Transportation
- 10.10 Packaging
- 10.11 Conclusion

11. SAUSAGE MANUFACTURING PROCESS
11.1 Types of Sausage

11.2 Sausage Production Processing

11.2.1 Selecting Ingredients

11.2.2 Grinding Meat Ingredients

11.2.3 Blending the Meat and Non-Meat Ingredients

11.2.4 Stuffing and Filling

11.2.5 Smoking

11.2.6 Packaging and Storage

12. PLANT LAYOUT DESCRIPTION-SAUSAGE MANUFACTURING

12.1 Reception and Storage Area

12.2 Meat Preparation Area

12.3 Meat Grinding Area

12.4 Mixing Area

12.5 Emulsification Area

12.6 Stuffing Area

12.7 Linking and Hanging Area

12.8 Cooking/Smoking Area

12.9 Cooling Area

12.10 Packaging Area

12.11 Storage and Dispatch Area

12.12 Quality Control Lab

12.13 Waste Management Area

12.14 Utility and Support Areas

13. MISCELLANEOUS CANNED MEAT PRODUCTS

13.1 General Instruction to be Observed for Processing

Canned Items under Steam or under the Combination

of Steam and Water Pressure

13.1.1 General Instructions

13.1.2 Retort Procedure During Cooking and Chilling

Operations

13.1.2.1 Exceptions to the Above Rules

13.2 Brown Gravy (Retort Type)

13.2.1 Procedure

13.3 Brown Gravy

13.3.1 Procedure

13.3.2 Suggested Process

13.3.3 Suggested Uses

13.4 Brown Gravy with Sliced Beef (Semi-cold Pack)

13.4.1 Prepare Beef Slices

13.4.2 Prepare Gravy

13.4.3 Suggested Process

13.5 Bee and Gravy (Cold Pack) (70% Beef, 30% Gravy)

13.5.1 Procedure

13.5.2 Suggested Process

13.6 Beef and Gravy (Cold Pack)

13.6.1 Procedure

13.6.2 Suggested Process

13.7 Sliced Beef in Gravy (for 100-Gallon Batch)

13.7.1 Procedure

13.8 Swiss Steak in Gravy

13.8.1 Prepare Meat

13.8.2 Prepare Gravy

- 13.8.3 Fill and Close
- 13.8.4 Suggested Process
- 13.9 Beef Stew Canned with Pre-cooked Gravy or Cold

# Gravv

- 13.9.1 Pre-Cooked Gravy Procedure
- 13.9.1.1 Pack and Process
- 13.9.2 Cold Gravy Procedure
- 13.9.2.1 To Make Cold Gravy
- 13.9.2.2 Mix and Process
- 13.9.3 Suggested Process for Either Type of Gravy
- 13.10 Beef Stew with Dehydrated Potatoes
- 13.10.1 Procedure
- 13.11 Southern-Style Brunswick Stew (Hot Pack)
- 13.11.1 Procedure
- 13.11.2 Suggested Process
- 13.12 Beef Stroganoff (Hot-Pack)
- 13.12.1 Prepare Meat
- 13.12.2 Prepare Gravy
- 13.12.3 Pack
- 13.12.4 Suggested Process
- 13.13 Georgia Hash (Hot Pack)
- 13.13.1 Procedure
- 13.13.2 Suggested Process
- 13.14 Georgia Hash (Cold Pack)
- 13.14.1 Procedure
- 13.14.2 Process
- 13.15 Hungarian-Style Beef and Vegetable Dinner

# (Cold Pack)

- 13.15.1 Procedure
- 13.15.2 Suggested Process
- 13.15.3 For Pork and Vegetable Dinner
- 13.16 Hungarian-Style Goulash (Hot Pack)
- 13.16.1 Prepare Meat
- 13.16.2 Prepare Gravy
- 13.16.3 Fill and Close
- 13.16.4 Suggested Process
- 13.17 Hungarian Beef Goulash (Cold Pack)
- 13.17.1 Procedure
- 13.17.2 Suggested Process
- 13.18 Pork and Rice Creole Dinner
- 13.18.1 Procedure
- 13.18.2 Suggested Process
- 13.19 Lima Beans with Ham (Hot Pack)
- 13.19.1 Prepare Hams
- 13.19.2 Prepare Lima Beans
- 13.19.3 Make Gravy
- 13.19.4 Fill and Close
- 13.19.5 Suggested Process
- 13.20 Creamed Chipped Beef
- 13.20.1 Process
- 13.21 Creamed Chipped Beef (Hot Pack)
- 13.21.1 Procedure
- 13.21.2 Suggested Process

13.22 Stuffed Green Peppers in Tomato Sauce 13.22.1 Prepare Filling 13.22.2 Prepare Sauce 13.22.3 Assemble, Fill Cans, and Close 13.22.4 Suggested Process 13.23 Chop Suey with Vegetable and Beef or Pork 13.23.1 Procedure 13.23.2 Suggested Process 13.24 Smoked Ham with Raisin Sauce 13.24.1 Procedure 13.24.2 Suggested Process 13.25 Canned Ham Saled Spread 13.25.1 To Prepare Meat 13.25.2 To Prepare Dressing 13.25.3 Combine, Fill, and Process 13.26 Meat Balls in Tomato Sauce (Institutional Pack in no. 10 Tins) 13.26.1 Prepare Meat Balls 13.26.2 Prepare Sauce 13.26.3 Fill, Close, and Process 13.26.4 Suggested Process 13.26.5 Chill 13.27 Meat Balls in Brown Gravy (Institutional Pack in no. 10 Tins) 13.27.1 Prepare Meat Balls 13.27.2 Prepare Gravy 13.27.3 Fill, Close, Process, and Chill 13.28 Meat Balls in Spaghetti Sauce 13.28.1 Prepare Meat Balls 13.28.2 Prepare Sauce 13.28.3 Fill, Close, Process 13.28.4 Suggested Process 13.29 Spaghetti and Meat Balls in Tomato Sauce with Cheese 13.29.1 Prepare Meat Balls 13.29.2 Prepare Sauce 13.29.3 Prepare Spaghetti 13.29.4 Assemble and Pack 13.29.5 Suggested Process 13.30 Spaghetti Meat Sauce (Hot Pack) 13.30.1 Procedure 13.30.2 Suggested Process 13.31 Cocktail Meat Balls (Dry Pack) 13.31.1 Prepare Mixture 13.31.2 Fry or Broil 13.31.2.1 To Fry 13.31.2.2 To Broil 13.31.3 Drain, Pack, and Fill 13.31.4 Suggested Process 13.31.5 Chill 13.32 Beef and Macaroni in Cheese Sauce (Hot Pack) 13.32.1 Prepare Meat 13.32.2 Prepare Cheese Sauce 13.32.3 Prepare Macaroni

- 13.32.4 Pack
- 13.32.5 Suggested Process
- 13.33 Beef and Noodle Dinner
- 13.33.1 Prepare Meat
- 13.33.2 Prepare Egg Noodles
- 13.33.3 Prepare Gravy
- 13.33.4 Pack
- 13.33.5 Suggested Process
- 13.34 Pork and Beans in Tomato Sauce (Hot Pack)
- 13.34.1 Prepare Pork and Beans
- 13.34.2 Prepare Sauce
- 13.34.3 Fill Cans
- 13.34.4 Suggested Process
- 13.35 Ranch-Style Beans with Meat Balls
- 13.35.1 Prepare Beans
- 13.35.2 Prepare Meat Balls
- 13.35.3 Prepare Sauce
- 13.35.4 Pack and Process
- 13.35.5 Suggested Process
- 13.36 Chili with Beans with Textured Soy Flour
- 13.36.1 Procedure
- 13.37 Chili Con Carne with or without Beans
- 13.37.1 Procedure
- 13.37.1.1 Processing and Cooling
- 13.38 Plain Chili Con Carne (Hot Pack)
- 13.38.1 Procedure
- 13.38.2 Suggested Process
- 13.39 Chili Con Carne with Beans (Hot Pack)
- 13.39.1 Procedure
- 13.39.2 Suggested Process
- 13.40 Chili Con Carne with Beans (Cold Pack)
- 13.40.1 Procedure
- 13.40.2 Suggested Process
- 13.41 Chili Mak (Cold Pack)
- 13.41.1 Procedure
- 13.41.2 Suggested Process
- 13.42 Hot Dog Chili Sauce with Meat (Hot Pack)
- 13.42.1 Procedure
- 13.42.2 Suggested Process
- 13.43 Pizza Filler with Beef (Hot Pack)
- 13.43.1 Procedure
- 13.43.2 Suggested Process
- 13.44 Sloppy Joe with Textured Soy Flour
- 13.44.1 Procedure
- 13.45 Sloppy Joe (Cold Pack)
- 13.45.1 Procedure
- 13.45.2 Suggested Process
- 13.46 Ground Beef in Barbecue Sauce (Hot Pack)
- 13.46.1 Cook Meat
- 13.46.2 Make Sauce
- 13.46.3 Fill
- 13.46.4 Suggested Process
- 13.47 Ground Beef in Barbecue Sauce (Semicold Pack)

- 13.47.1 Procedure 13.47.2 Suggested Process
- 13.48 Sliced Beef in Barbecue Sauce (Hot Pack)
- 13.48.1 Prepare Meat
- 13.48.2 Prepare Sauce
- 13.48.3 Fill Cans
- 13.48.4 Suggested Process
- 13.49 Sliced Pork in Barbecue Sauce
- 13.49.1 To Prepare Meat
- 13.49.2 To Prepare Sauce
- 13.49.3 To Process
- 13.50 Barbecued Beef in Sauce (Hot Pack)
- 13.50.1 Barbecue the Beef
- 13.50.2 Prepare Sauce
- 13.50.3 Fill Cans and Close
- 13.50.4 Suggested Process
- 13.51 Barbecue Party Dip
- 13.51.1 Procedure
- 13.51.2 Suggested Process
- 13.52 Corn Meal Mush with Bacon
- 13.52.1 Procedure
- 13.52.2 Suggested Process
- 13.53 Philadelphia Scrapple
- 13.53.1 Procedure
- 13.53.2 Suggested Process
- 13.54 Mince Meat Pie Filling
- 13.54.1 Procedure
- 13.54.2 Fill and Process
- 13.55 Rum Flavouring for Mince Meat
- 13.56 Brandy Flavoring for Mince Meat
- 13.57 English-Style Pork Kidneys in Lemon Sauce
- 13.57.1 Procedure
- 13.57.2 Suggested Process
- 13.58 Canned Rabbit Meat
- 13.58.1 To Can the Meat
- 13.58.2 To Can Pieces
- 13.58.3 Process
- 13.59 Canned Frog Legs
- 13.60 Canned Ham and Eggs
- 13.60.1 Procedure
- 13.60.2 Suggested Process
- 13.61 Canned Brains with Gravy
- 13.61.1 Procedure
- 13.62 Canned Beef Tripe
- 13.62.1 Selection of Tripe
- 13.62.2 Treatment Prior to Canning
- 13.62.3 Fill Cans
- 13.62.4 Suggested Process
- 14. STANDARDS AND QUALITY CONTROL MEASURES FOR MEAT

### AND MEAT PRODUCTS

- 14.1 Total Viable Counts
- 14.2 Coliforms
- 14.3 Enterococci

- 14.4 Other Indicators
- 14.5 Standards in Meat Industry
- 14.6 Hazard Analysis Critical Control Point (HACCP) System
- 14.7 ISO-9000 Standards
- 15. PLANT LAYOUT DESCRIPTION-MEAT PROCESSING
- 15.1 Reception Area
- 15.2 Slaughter Area
- 15.3 Primary Processing Area
- 15.4 Secondary Processing Area
- 15.5 Further Processing Area
- 15.6 Packaging Area
- 15.7 Cold Storage
- 15.8 Dispatch and Loading Area
- 15.9 By-Product Processing Area
- 15.10 Waste Treatment Area
- 15.11 Quality Control and Laboratory
- 15.12 Ancillary Areas
- 16. SOUPS, GRAVIES, AND SAUCES (INCLUDING MIXES)
- 16.1 Making Stocks, Extract, and Mixes
- 16.2 Beef Soup Stock
- 16.2.1 Beef Stock with Vegetables Added
- 16.3 Chicken Soup Stock
- 16.4 Beef Extract
- 16.5 Manufacture of Dry Soups and Gravy Mixes
- 16.5.1 General Tips
- 16.5.2 Small-Scale Production
- 16.5.3 Large-Scale Production
- 16.6 Soups
- 16.7 Canned Beef Consomme
- 16.7.1 Procedure
- 16.7.2 Fill
- 16.7.3 Suggested Process
- 16.8 Canned Jellied Beef Consomme
- 16.8.1 Suggested Process
- 16.9 Spanish Bean Soup (Single Strength)
- 16.9.1 Procedure
- 16.9.2 Suggested Process
- 16.10 Frozen Gazpacho
- 16.10.1 Procedure
- 16.11 Canned Chicken Broth
- 16.11.1 Procedure
- 16.11.2 Suggested Process
- 16.12 Chicken-Flavoured Soup with Textured Vegetable

# Protein

- 16.12.1 Procedure
- 16.13 Canned Chicken Gumbo Soup
- 16.13.1 Procedure
- 16.13.2 Suggested Process
- 16.14 Condensed Beef Bouillon or Broth
- 16.14.1 Procedure
- 16.14.2 Suggested Process
- 16.15 Condensed Beef Bouillon or Broth with Rice
- 16.15.1 Suggested Process

16.16 Canned Condensed Chicken Broth 16.16.1 Procedure 16.16.2 Suggested Process 16.17 Canned Condensed Chicken and Noodle Soup 16.17.1 Suggested Process 16.18 Canned Condensed Chicken Broth with Rice 16.18.1 Suggested Process 16.19 Condensed Beef and Noodle Soup 16.19.1 Prepare Beef and Noodles 16.19.2 Prepare Base 16.19.3 Fill 16.19.4 Suggested Process 16.20 Canned Condensed Beef Soup with Vegetables and 16.20.1 Prepare Base 16.21 Prepare Vegetables and Meat 16.21.1 Fill 16.21.2 Suggested Process 16.22 Condensed Cream of Chicken Soup 16.22.1 Procedure 16.22.2 Suggested Process 16.23 Canned Condensed Cream of Chicken Soup 16.23.1 Procedure 16.23.2 Suggested Process 16.24 Canned Condensed Chicken Vegetable Soup 16.24.1 Prepare Meat and Vegetables 16.24.2 Prepare Soup 16.24.3 Fill 16.24.4 Suggested Process 16.25 Condensed Old-Fashioned Vegetable Soup 16.25.1 Prepare Vegetable-Macaroni Mixture 16.25.2 Prepare Soup Base 16.25.3 Fill 16.25.4 Suggested Process 16.26 Canned Condensed Pea Soup 16.26.1 Procedure 16.26.2 Suggested Process 16.27 Canned Condensed Lentil Soup 16.27.1 Suggested Process 16.28 Canned Condensed Cream of Celery Soup 16.28.1 Procedure 16.28.2 Suggested Process 16.29 Canned Condensed Cream of Asparagus Soup 16.29.1 Suggested Process 16.30 Canned Condensed Cream of Spinach Soup 16.30.1 Procedure 16.30.2 Suggested Process 16.31 Canned Condensed Onion Soup 16.31.1 Procedure 16.31.2 Suggested Process 16.32 Canned Condensed Mulligatawny Soup 16.32.1 Procedure 16.32.2 Suggested Process

16.33 Canned Condensed Oxtail Soup 16.33.1 Procedure 16.33.2 Suggested Process 16.34 Canned Condensed Mock Turtle Soup 16.34.1 Procedure 16.34.2 Suggested Process 16.35 Green Turtle Soup 16.35.1 Procedure 16.35.2 Suggested Process 16.36 Snapping Turtle Soup 16.36.1 Procedure 16.36.2 Suggested Process 16.37 Beef-Flavour Soup and Gravy Base Mix 16.37.1 Procedure 16.37.2 To Use 16.38 Beef-Type Broth Mix (Low Sodium) 16.38.1 Procedure 16.38.2 To Use 16.39 Beef Broth Base Mix (Paste from) 16.39.1 Procedure 16.39.2 Recommended Use 16.40 Beef Soup Mix 16.40.1 Procedure 16.40.2 To Reconstitute 16.41 Jellied Beef Consomme Base Mix 16.41.1 Procedure 16.41.2 Recommended Use 16.42 Beef Noodle Soup Base Mix 16.42.1 Procedure 16.42.2 To Use 16.43 Beef Noodle Soup Mix 16.43.1 Procedure 16.43.2 To Use 16.44 Chicken-Type Broth Mix (Low Sodium) 16.44.1 Procedure 16.44.2 To Use 16.45 Clear Chicken Soup Base Mix 16.45.1 Procedure 16.45.2 Recommended Use 16.46 Jellied Chicken Soup Base Mix 16.46.1 Recommended Use 16.47 Soup Dehydrated, Chicken (Type II with Noodles) 16.48 Chicken Noodle Soup Mix 16.48.1 Procedure 16.48.2 To Rehydrate 16.49 Cream of Chicken Soup Base Mix 16.49.1 Procedure 16.49.2 To Use 16.50 Cream of Chicken Soup Mix 16.50.1 Procedure 16.50.2 To Rehydrate 16.51 Chicken Noodle Soup Mix (Dry Style) 16.51.1 Procedure

16.51.2 To Rehydrate 16.52 Chicken Noodle Soup Mix (Paste Style) 16.52.1 Procedure 16.52.2 To Rehydrate 16.53 Chicken-Flavoured Soup Base Mix 16.53.1 Procedure 16.54 Cream of Mushroom Soup Mix 16.54.1 Procedure 16.54.2 To Use 16.55 Instant Onion Soup Mix 16.55.1 Procedure 16.55.2 To Use 16.56 Oxtail Soup Mix 16.56.1 Procedure 16.56.2 To Reconstitute 16.57 Mulligatawny Soup Mix 16.57.1 Procedure 16.57.2 To Reconstitute 16.58 Mock Turtle Soup Mix 16.58.1 Procedure 16.58.2 To Reconstitute 16.59 Beet Soup Mix (Borscht) 16.59.1 Procedure 16.59.2 Recommended Use 16.60 Gravy for Frozen Pot Pies 16.60.1 Chicken Pies 16.60.2 For Turkey Pies 16.60.3 For Tuna Pies 16.61 Frozen Extender for Roast Chicken or Turkey Gravy 16.61.1 Procedure 16.61.2 To Use

16.62 Frozen Giblet Gravy 16.62.1 Prepare Giblets 16.62.2 Prepare Gravy

16.64 Au Jus Gravy Mix 16.64.1 Procedure 16.64.2 To Use

16.65.1 Procedure 16.65.2 To Use

16.67.1 Procedure 16.67.2 To Use

16.68.1 Procedure 16.68.2 To Use

16.69.1 Procedure

16.66 Brown Gravy Mix 16.66.1 Procedure 16.66.2 To Use

16.67 Brown Gravy Mix (Dry)

16.68 Chicken Gravy Mix (Dry)

16.69 Chicken-Flavoured Gravy Mix (Cook-up Type)

16.63 Dry Mix Soup and Gravy Base Beef

16.65 Gravy Mix for Keep Pot Roast

16.62.3 To Use

- 16.69.2 To Prepare Gravy 16.70 Chicken-Flavored Gravy Mix 16.70.1 Procedure 16.70.2 To Use 16.71 Turkey-Flavored Instant Gravy Mix 16.71.1 Procedure 16.71.2 To Use 16.72 Mushroom Gravy Mix 16.72.1 Procedure 16.72.2 To Use 16.73 Ham-Style Gravy Mix 16.73.1 Procedure 16.73.2 To Use 16.74 Sauces 16.75 Bordelaise Sauce for Freezing 16.75.1 Procedure 16.76 Bottled Meat Sauce 16.76.1 Procedure 16.77 Frozen Sauce a La Barbara with Ham-Like Textured Vegetable Protein Dice 16.77.1 Procedure 16.78 Marinara Sauce Base Mix 16.78.1 Procedure 16.78.2 To Use 16.79 Barbecue Sauce 16.79.1 Procedure 16.80 Barbecue Sauce Mix 16.80.1 Procedure 16.81 Barbecue Sauce Mix 16.81.1 Procedure 16.81.2 To Use 16.82 Oil Spice for Barbecue Sauce 16.83 Ground Beef in Barbecue Sauce (Hot Pack) 16.83.1 Cook Meat 16.83.2 Make Sauce 16.83.3 Fill 16.83.4 Suggested Process 16.84 Ground Beef in Barbecue Sauce (Semicold Pack) 16.84.1 Procedure 16.84.2 Suggested Process 16.85 Barbecue Sauce Prepared with Peanut Flour 16.85.1 Procedure 16.86 Barbecue Sauce 16.86.1 Processing Pointers 16.87 Canned Sweet Barbecue Sauce (Can be Used with Relish and/or Chutney) 16.87.1 Procedure 16.88 Canned Barbecue Sauce
- 17.2 Packaging of Fresh Meat17.2.1 Packaging Requirements

17.1 Importance of Meat Packaging

16.88.1 Procedure

17.2.2 Packaging Materials and Techniques

17. MEAT AND POULTRY PRODUCTS PACKAGING

- 17.3 Packaging of Frozen Meat
- 17.3.1 Packaging Requirements
- 17.3.2 Packaging Materials
- 17.4 Packaging of Cured Meat
- 17.4.1 Packaging Requirements
- 17.4.2 Packaging Materials
- 17.5 Packaging of Thermo-Processed / Cooked Meat
- 17.6 Packaging of Dehydrated Meat
- 17.7 Packaging of Meat Products
- 17.7.1 Packaging Materials
- 17.8 Packaging of Poultry
- 17.8.1 Packaging Materials
- 17.9 Modern Trends in Meat and Poultry Packaging
- 17.9.1 Retortable Flexible Pouch
- 17.9.2 Roast-in-Bags
- 17.9.3 Microwave Packages
- 17.9.4 Cryovac Packages
- 18. COLD CHAIN MANAGEMENT IN MEAT STORAGE, DISTRIBUTION AND RETAIL
- 18.1 Meat Spoilage
- 18.2 Meat Supply Cold Chain Management
- 18.2.1 Cold Chain in Slaughterhouse
- 18.2.1.1 Air Chilling
- 18.2.1.2 Immersion Chilling
- 18.2.1.3 Spray Chilling
- 18.2.1.4 Vacuum Chilling
- 18.2.2 Cold Chain in Meat Distribution
- 18.2.3 Cold Chain in Meat Retail
- 18.3 Available Options in Meat Supply Cold Chain Management
- 18.3.1 Chilled and Frozen Storage Combinations
- 18.3.2 Superchilling
- 18.3.3 Ionizing Radiation
- 18.3.4 Biopreservation
- 18.3.5 High Hydrostatic Pressure (HHP)
- 18.3.6 Active Packaging
- 18.3.6.1 Antimicrobial Active Packaging
- 18.3.6.2 Antioxidant Active Packaging
- 18.6.6.3 Carbon-Dioxide Emitting/Generating

## Packaging

- 18.3.7 Wireless Sensors
- 19. BIS STANDARDS
- 20. ISO STANDARDS
- 21. FACTORY LAYOUT AND PROCESS FLOW CHART & DIAGRAM
- 22. PHOTOGRAPHS OF PLANT AND MACHINERY WITH SUPPLIERS CONTACT DETAILS
- Meat Dicer
- Meat Mixer and Grinder
- Brine Injector-Tenderiser
- Frozen Meat Block Cutter
- Table Band Saw
- Meat Ball Forming Machine
- Blast Chiller Refrigerator
- Vacuum Meat Tumbler
- Meat Mincer
- Vacuum Meat Bowl Cutter for Sausage or Can Food

- Meat Tenderizer
- Vacuum Filler
- Sausage Peeler
- Meat Mixer
- Sausage Cooking Vat
- Double Chamber Vacuum Packaging Machine
- Semi-Automatic Tray Sealer
- Smoke Chamber
- Sausage Clipping Machine
- Automatic Thermoforming Packing Machine
- Sausage Stuffer / Filler
- Automatic Digital Meat Flattening Machine
- Air Chiller
- Can Seamer

# **About NIIR**

**NIIR PROJECT CONSULTANCY SERVICES (NPCS)** is a reliable name in the industrial world for offering integrated technical consultancy services. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our various services are: Detailed Project Report, Business Plan for Manufacturing Plant, Start-up Ideas, Business Ideas for Entrepreneurs, Start up Business Opportunities, entrepreneurship projects, Successful Business Plan, Industry Trends, Market Research, Manufacturing Process, Machinery, Raw Materials, project report, Cost and Revenue, Pre-feasibility study for Profitable Manufacturing Business, Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Business Opportunities, Investment Opportunities for Most Profitable Business in India, Manufacturing Business Ideas, Preparation of Project Profile, Pre-Investment and Pre-Feasibility Study, Market Research Study, Preparation of Techno-Economic Feasibility Report, Identification and Section of Plant, Process, Equipment, General Guidance, Startup Help, Technical and Commercial Counseling for setting up new industrial project and Most Profitable Small Scale Business.

NPCS also publishes varies process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.

Our Detailed Project report aims at providing all the critical data required by any entrepreneur vying to venture into Project. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.

NIIR PROJECT CONSULTANCY SERVICES, 106-E, Kamla Nagar, New Delhi-110007, India.

Email: npcs.india@gmail.com Website: NIIR.org

Fri, 09 May 2025 08:34:54 +0000