Comprehensive Food Safety, Hygiene & Handling Manual

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Module 1: Introduction to Our Food Safety Culture

1.1 Statement of Policy & Commitment

Our Company is unconditionally committed to upholding the highest possible standards of food safety and hygiene. Our primary goal is to provide our customers with products that are not only of superior quality and taste but are, above all, safe to consume. We recognize that food safety is a shared responsibility that extends from our suppliers to every member of our kitchen and front-of-house staff.

This manual serves as the foundational document for our Food Safety Management System (FSMS). It outlines the mandatory policies, procedures, and best practices that govern our daily operations. Adherence to this protocol is a fundamental condition of employment. We pledge to provide the necessary training, resources, and environment to empower every employee to be a guardian of our food safety standards.

Our commitment is to:

- Comply with, and exceed, all applicable food safety legislation and regulations.
- Proactively identify and control potential food safety hazards through a robust HACCP-based system.
- Foster a culture of continuous improvement in our food safety practices.
- Ensure all staff are trained and competent in their food safety responsibilities.
- Never compromise on the safety of our ingredients or our finished products.

1.2 Scope and Application

This policy applies to all individuals who enter our food production, storage, and service areas, including, but not limited to:

- Full-time and part-time kitchen personnel (chefs, bakers, assistants).
- Cleaning and maintenance staff.
- Management and administrative staff when present in kitchen areas.
- Delivery personnel and suppliers entering storage areas.
- External contractors and visitors.

The procedures outlined in this manual cover all stages of our operation, from the receipt of raw materials to the final sale of products to the customer. This includes procurement, storage, preparation, cooking, baking, cooling, decorating, packaging, and display.

1.3 Regulatory Framework & Compliance

Our food safety protocols are designed to be fully compliant with the stringent requirements of both national and international food safety bodies. The primary regulatory frameworks governing our operations are:

- **Regulation (EC) No 852/2004:** On the hygiene of foodstuffs, which establishes the legal obligation for food business operators to implement and maintain a permanent procedure based on Hazard Analysis and Critical Control Points (HACCP) principles.
- **Spanish Royal Decree (Real Decreto) 109/2010:** Which modifies various decrees in line with European regulations on food safety.
- **World Health Organization (WHO):** The principles outlined in the "Five Keys to Safer Food" serve as a practical foundation for our training and daily practices.
- **Codex Alimentarius:** We acknowledge the international food standards, guidelines, and codes of practice contributed by the Codex Alimentarius Commission.

Failure to comply with these regulations can result in severe legal penalties, business closure, and irreparable damage to our brand reputation. All employees are expected to understand their role in maintaining our legal compliance.

1.4 Roles and Responsibilities

- **Management Team:** Responsible for providing the necessary resources (equipment, training, time), fostering a positive food safety culture, and ensuring the FSMS is effectively implemented and reviewed. The Head Chef holds ultimate responsibility for all kitchen operations.
- **Head Chef / Kitchen Manager:** Responsible for the day-to-day implementation of all food safety procedures, staff training, monitoring of critical control points, and taking corrective actions.
- **All Kitchen Personnel:** Responsible for understanding and strictly adhering to all procedures outlined in this manual, maintaining the highest standards of personal hygiene, and reporting any potential food safety hazards or illnesses immediately to their manager.
- **Human Resources:** Responsible for maintaining training records and ensuring all employees, including new hires, receive comprehensive food safety training as part of their induction.

Module 2: Personal Hygiene & Health Standards

2.1 The Critical Importance of Personal Hygiene

The human body is a primary vehicle for the transfer of pathogenic microorganisms. Bacteria such as *Staphylococcus aureus* are naturally present on the skin and in the nasal passages of many healthy people. Improper hygiene can easily transfer these and other pathogens to food, leading to severe illness. Therefore, impeccable personal hygiene is the first line of defense in preventing foodborne illness.

2.2 Hand Hygiene Protocol

Handwashing is the single most important action an employee can take to prevent food contamination. Designated handwashing sinks, equipped with hot water, liquid soap, and single-use paper towels, are to be used for handwashing only. Sinks used for food preparation or equipment washing must never be used for washing hands.

The Mandatory 7-Step Handwashing Procedure:

1. **Wet Hands:** Wet hands thoroughly with clean, running hot water (as hot as can be comfortably tolerated).
2. **Apply Soap:** Apply a sufficient amount of liquid antibacterial soap to create a good lather.
3. **Lather and Scrub (20 seconds):** Vigorously rub hands together for at least 20 seconds. This is the critical step. Ensure all surfaces are scrubbed, including:
    - Back of hands
    - Wrists
    - Between fingers
    - Under fingernails (scrub fingertips against palms)
    - Thumbs
4. **Rinse:** Rinse hands thoroughly under clean, running water, ensuring all soap residue is washed away.
5. **Dry:** Dry hands completely using a single-use paper towel.
6. **Turn off Tap:** Use the paper towel to turn off the tap to avoid re-contaminating hands.
7. **Dispose:** Dispose of the paper towel in a foot-operated bin.

When to Wash Hands (Mandatory):

- Upon entering the kitchen and before starting work.
- Immediately before handling any ready-to-eat food.
- Immediately after handling raw ingredients (e.g., flour, eggs, unwashed fruit).
- After using the toilet.
- After handling rubbish or waste bins.
- After touching hair, face, nose, or mouth.
- After sneezing, coughing, or using a tissue.
- After performing any cleaning tasks or handling chemicals.
- After taking a break, eating, drinking, or smoking.
- Before and after wearing disposable gloves.

2.3 Uniform & Personal Protective Equipment (PPE) Policy

The company-provided uniform is a critical piece of safety equipment designed to protect food from contamination. It must not be worn outside the work premises.

- **Uniform Components:**
    - **Chef's Jacket/Tunic:** Must be clean at the start of every shift. It should be light-coloured to make any dirt easily visible.
    - **Trousers:** Clean chef's trousers (checkered or black). Must be in good repair.
    - **Apron:** A clean apron must be worn over the uniform. Aprons should be removed before visiting the toilet or leaving the food production area.
    - **Head Covering:** A hairnet, chef's hat, or skull cap is mandatory for all personnel entering food production areas. It must completely contain all hair, including fringes. Beards longer than stubble must be covered by a beard snood.
    - **Footwear:** Sturdy, non-slip, closed-toe safety shoes are mandatory. This is both a hygiene and a personal safety requirement to protect against falling objects and slips.
- **Jewellery Policy (Strict Enforcement):**
    - **Prohibited:** No watches, bracelets, rings with stones, or earrings are permitted. These items can harbour bacteria and pose a physical contamination risk if they fall into food.
    - **Permitted:** A single, plain metal band (e.g., a wedding ring) is the only exception. However, it is strongly recommended that even this be removed.
- **Nails and Cosmetics:**
    - **Nails:** Fingernails must be kept short, clean, and unvarnished. False nails, nail extensions, and nail varnish are strictly prohibited as they can chip off (physical hazard) and harbour bacteria (biological hazard).
    - **Cosmetics:** The use of heavy makeup, perfume, and aftershave is discouraged as strong scents can be absorbed by food products, particularly those with high fat content like butter and cream.
- **Disposable Gloves:**
    - Gloves are not a substitute for handwashing. Hands must be washed before putting on gloves and after removing them.
    - Gloves must be changed frequently:
        - If they become torn or soiled.
        - After handling raw ingredients and before touching ready-to-eat food.
        - At least every two hours of continuous use.

2.4 Illness and Injury Reporting

Protecting our customers and your colleagues from illness is a legal and moral obligation.

- **Reporting Illness:** Employees must not work if they are suffering from any of the following symptoms:
    1. Vomiting
    2. Diarrhoea
    3. Fever
    4. Sore throat with fever

5. Jaundice (yellowing of skin or eyes)
6. Infected wounds or skin lesions (boils, cuts) on exposed parts of the body.

- You are legally required to report these symptoms to your manager *before* your shift begins. You may not return to work until you have been symptom-free for at least 48 hours after the symptoms have stopped.
- **Reporting Foodborne Illness Diagnosis:** If you are diagnosed by a medical professional with an illness that can be transmitted through food (e.g., Norovirus, Hepatitis A, Salmonella, E. coli), you must immediately inform your manager.
- **Cuts, Burns, and Abrasions:**
    1. All cuts and abrasions, no matter how small, must be immediately cleaned and treated.
    2. The wound must be completely covered with a brightly coloured, waterproof plaster (blue is the industry standard as it is not a natural food colour and is easily visible).
    3. If the cut is on the hand, a disposable glove must be worn over the plaster.
    4. If a wound is infected or cannot be properly covered, the employee must not handle food and may be assigned to other duties.

2.5 Prohibited Actions in Food Handling Areas

To maintain a sterile and professional environment, the following actions are strictly prohibited within all food preparation, production, and storage areas:

- **Eating, Drinking, or Chewing Gum:** All personal food and drink must be consumed in designated break areas only. A closed-lidded water bottle is the only exception and must be kept in a designated area away from food preparation surfaces.
- **Smoking or Vaping:** Smoking and the use of e-cigarettes are strictly forbidden within the entire building and near any entrances or open windows.
- **Tasting Food:** Tasting must be done hygienically. Use a clean teaspoon for each taste. Never use your fingers or "double-dip" a utensil that has been in your mouth.
- **Personal Items:** Personal belongings such as mobile phones, keys, and bags must be stored in the designated lockers and are not permitted in food production areas. Mobile phones are a significant source of contamination.
- **Improper Conduct:** Unprofessional conduct such as running, shouting, or sitting on work surfaces is forbidden.

Module 3: Preventing Cross-Contamination

3.1 Understanding Cross-Contamination

Cross-contamination is the process by which bacteria or other harmful microorganisms are unintentionally transferred from one object or surface to another. In a bakery kitchen, this typically occurs in three ways:

- **Food-to-Food:** When raw ingredients (e.g., juices from unwashed fruit, raw egg) come into contact with ready-to-eat (RTE) products (e.g., a finished cake, cream filling).
- **People-to-Food:** When unwashed hands transfer pathogens to food after touching a contaminated surface or raw ingredient.
- **Equipment-to-Food:** When contaminated utensils, cutting boards, or surfaces are used for RTE food without being properly cleaned and sanitized.

Preventing cross-contamination is a non-negotiable aspect of our daily operations.

3.2 Segregation of Raw and Ready-to-Eat (RTE) Foods

A physical separation must be maintained between raw materials and RTE products at all stages of production.

- **Preparation Areas:**
    - A designated "raw zone" must be established for handling ingredients like raw eggs, unwashed vegetables/fruits, and raw flour.
    - All RTE products, such as cooked custards, fresh creams, finished pastries, and cakes, must be handled in a separate, designated "RTE zone."
    - If space limitations make completely separate zones impractical, preparation must be done at different times. The area must be thoroughly cleaned and sanitized after raw food preparation is complete and before RTE food preparation begins.
- **Storage - The Golden Rule:** In all refrigerators, freezers, and dry storage areas, **raw products must ALWAYS be stored below RTE products.** This prevents any potential drips or spills from contaminating safe food.
    - **Correct Refrigerator Hierarchy (Top to Bottom):**
        1. Ready-to-eat foods (cakes, pastries, fillings) - *Top Shelves*
        2. Unwashed fruits and vegetables
        3. Raw eggs (in a sealed, clean container) - *Bottom Shelf*
- **Containers:** All stored food must be in food-grade, sealed containers to prevent contamination. Open cans are not permitted for storage; transfer contents to a suitable container.

3.3 Colour-Coding System for Equipment

To provide a clear, visual aid in preventing cross-contamination, this kitchen will implement a mandatory colour-coding system for cutting boards, knives, and other transferable equipment.

- **Green:** For fresh fruits and vegetables.
- **Yellow:** For cooked products.
- **Red:** For raw meats (if ever used for specialty savoury items).
- **White:** For bakery and dairy products (e.g., bread, cheese).
- **Blue:** For raw fish (if ever used).

Implementation:

- A chart displaying the colour-coding system will be prominently posted in the kitchen.
- All staff must be trained on the system and its importance.
- Cutting boards and knife handles corresponding to these colours will be used exclusively for their designated food type.
- Mixing these items is a serious breach of food safety protocol. For example, a green board used for chopping strawberries must never be used to slice a finished cake.

3.4 Kitchen Workflow and Traffic Patterns

The physical layout of the kitchen is designed to support a logical, one-way flow of production to minimize the risk of cross-contamination.

- **Workflow Path:** The process should ideally follow this sequence:
    - **Receiving Area:** Raw materials enter the premises.
    - **Raw Storage:** (Dry, Refrigerated, Frozen).
    - **Raw Preparation Zone:** Washing produce, cracking eggs, mixing batters.
    - **Cooking/Baking Zone:** Ovens, stovetops.
    - **Cooling Zone:** Blast chillers, cooling racks.
    - **RTE / Finishing Zone:** Decorating, filling, assembly of finished products.
    - **Packaging & Dispatch / Display.**
    - **Washing Zone (Warewashing):** Dirty equipment should follow a path that does not cross clean production areas.
- **Traffic Management:**
    - Staff should avoid moving back and forth between raw and RTE zones without first following proper handwashing and hygiene procedures (e.g., changing aprons).
    - Waste bins should be strategically placed and emptied regularly to avoid overflowing and creating a contamination risk. Waste should be moved out of the kitchen via a route that does not pass through clean RTE zones.

3.5 Handling Raw Flour as a Contaminant

While often overlooked, raw flour is a raw agricultural product and can be a source of pathogenic bacteria such as *E. coli* and *Salmonella*. It must be treated with the same caution as other raw ingredients.

- **No "Flour Cloud":** Scooping and handling flour should be done carefully to minimize airborne dust, which can settle on clean surfaces and RTE products.
- **Dedicated Equipment:** Use dedicated scoops and containers for flour.
- **Cleaning is Essential:** Any surface where flour has been used for dusting or kneading (e.g., workbenches, rolling pins) must be considered contaminated. These surfaces must be thoroughly scraped, washed, and sanitized before being used for any RTE products.
- **Never Taste Raw Dough/Batter:** Staff are strictly prohibited from tasting raw dough or batter containing uncooked flour and eggs.

Module 4: Time & Temperature Control

4.1 The Temperature Danger Zone (TDZ)

The most critical concept in temperature control is the **Temperature Danger Zone (TDZ)**. This is the temperature range in which foodborne bacteria can grow and multiply most rapidly.

The Danger Zone is between 5°C and 60°C.

Our primary objective is to keep high-risk foods out of this temperature range as much as possible. High-risk foods in our bakery include:

- Custards, crème pâtissière, and other egg-based fillings.
- Fresh cream, whipped cream, and cream cheese frostings.
- Any product containing dairy and eggs.

Rules of the Danger Zone:

- **Cold foods** must be held at **5°C or colder.**
- **Hot foods** must be held at **60°C or hotter.**
- **The 2-Hour/4-Hour Rule:** This rule applies to high-risk foods that need to be at room temperature for preparation or service.
    - **0-2 Hours:** Food can be used, or returned to the refrigerator (below 5°C) for later use.
    - **2-4 Hours:** Food can still be used but cannot be put back in the refrigerator. It must be used immediately or thrown away.
    - **Over 4 Hours:** Food must be discarded.

The total time a food spends in the TDZ is cumulative. This includes time during delivery, preparation, cooling, and display. Accurate temperature logs are mandatory for monitoring.

4.2 Calibrating and Using Food Thermometers

An uncalibrated thermometer is worse than no thermometer at all. All temperature readings rely on accurate, calibrated equipment. We use digital probe thermometers for accuracy.

Calibration Procedure (Mandatory Daily Check): Each kitchen must have a system for daily thermometer calibration. The two primary methods are:

1. **Ice Point Method (for 0°C):**
    - Fill a glass completely with crushed ice.
    - Add just enough cold water to fill the gaps. Let it sit for 2-3 minutes.
    - Insert the thermometer probe into the centre of the ice water, ensuring it doesn't touch the sides or bottom.
    - The thermometer should read **0°C**. If it is off by more than +/- 1°C, it must be recalibrated according to the manufacturer's instructions (usually by pressing a reset button or turning a calibration nut). If it cannot be recalibrated, it must be replaced.
2. **Boiling Point Method (for 100°C):**
    - Bring a pot of water to a full, rolling boil.
    - Insert the thermometer probe into the centre of the boiling water.
    - he thermometer should read **100°C** (adjust for altitude if necessary). Calibrate if the reading is off by more than +/- 1°C.

How to Use a Probe Thermometer Correctly:

- **Clean and Sanitize:** The probe must be cleaned and sanitized with an alcohol wipe *before and after* each use to prevent cross-contamination.
- **Measure the Core:** Insert the probe into the thickest part of the food, away from any bone or the bottom/sides of the pan.
- **Wait for a Stable Reading:** Allow the temperature reading to stabilize for at least 15 seconds before recording it.
- **Record the Temperature:** All critical temperature checks must be logged in the appropriate record book with the time, date, and initials of the person checking.

4.3 Critical Cooking and Baking Temperatures

Cooking and baking are the most effective Critical Control Points (CCPs) for eliminating biological hazards. Reaching a specific internal temperature for a sufficient amount of time is the only reliable way to ensure that harmful bacteria like *Salmonella* and *Listeria* are destroyed.

Visual cues (e.g., colour, firmness) are useful indicators of quality but are **not** reliable measures of food safety.

Minimum Internal Temperature Chart:

Food Product Category	Minimum Internal Temperature	Rationale & Additional Checks
Egg-based Custards & Fillings (e.g., Crème Pâtissière, Crème Brûlée base, Lemon Curd)	**74°C**	This is the standard temperature required to destroy *Salmonella* in egg products. A visual check should confirm the mixture has visibly thickened and coats the back of a spoon without running.
Cheesecakes (Baked)	**70°C**	Reaching this temperature ensures that the egg proteins have fully coagulated, which sets the structure of the cheesecake and ensures it is pasteurized and safe to eat. The centre should be just set with a slight wobble.
Quiches & Savoury Pies with Egg	**74°C**	This ensures that all ingredients, including the egg and dairy filling, are safely cooked through to the centre. The filling should appear set and not liquid.
Breads & Enriched Doughs (e.g., Brioche, Rolls)	**88°C - 93°C**	While not a high-risk food once baked, this temperature range indicates that the internal structure is fully cooked, starches have gelatinized, and moisture has evaporated. The bread will be light and sound hollow when tapped on the bottom.

Monitoring and Corrective Actions:

- **Monitoring:** The internal temperature of a sample from each batch of these high-risk products must be checked with a calibrated probe thermometer at the end of the

cooking/baking cycle. This reading must be recorded in the Daily Cooking Temperature Log.

- **Corrective Action:** If a product has not reached its minimum safe internal temperature, it must be immediately returned to the oven or stovetop. Cooking must continue, and the temperature should be re-checked every 5-10 minutes until the target temperature is reached and verified. The corrective action taken (e.g., "Returned to oven for 10 mins") must also be recorded in the log. This creates a complete record of the deviation and its resolution.

4.4 Safe Cooling Procedures for High-Risk Foods

Improper cooling is one of the most significant contributors to foodborne illness outbreaks globally. When a large volume of hot food is left to cool slowly at room temperature, it spends hours in the Temperature Danger Zone, creating a perfect incubator for bacterial spores that may have survived the cooking process to germinate and multiply to dangerous levels. Rapid cooling is therefore a critical control point.

The Mandatory Two-Stage Cooling Process: This process is a legal requirement and must be strictly followed for cooling all high-risk cooked foods, such as custards, pastry creams, and savoury fillings.

- **Stage 1: From 60°C down to 20°C within 2 hours.** This is the most critical phase, as it moves the food through the most dangerous part of the temperature range where bacteria multiply fastest.
- **Stage 2: From 20°C down to 5°C or below within the next 4 hours.** Once the food is out of the highest-risk temperature range, this second stage ensures it is brought to a safe refrigeration temperature.

The total maximum time for the entire cooling process is 6 hours.

Approved Rapid Cooling Methods: Simply placing a large, hot pot of custard directly into a standard refrigerator is not an effective or safe cooling method. This practice, known as "hot-filling," will raise the ambient temperature of the entire refrigerator, putting all other stored foods at risk, while the food in the pot remains in the danger zone for an extended period. The following methods must be used:

1. **Reduce Volume (Portioning):** This is the simplest and most effective initial step. Divide large batches of hot liquids (like crème anglaise or pastry cream) into multiple smaller, shallow pans (e.g., stainless steel hotel pans). A larger surface area allows heat to dissipate much more rapidly into the surrounding air.
2. **Ice Bath:** This method actively draws heat out of the product. Place the shallow pan of hot food into a larger container (or a clean, sanitized sink) filled with a mixture of ice and water. The ice water should come up the sides of the pan containing the food. Stir the

food product frequently with a clean, sanitized utensil to bring the hotter liquid from the centre to the colder edges, which dramatically speeds up the cooling process.

3. **Ice Wands/Paddles:** These are purpose-made, food-safe plastic paddles that are filled with water and frozen. They can be stirred directly into large pots of liquids to cool the product from the inside out, working in conjunction with an ice bath for maximum efficiency. They must be properly cleaned and sanitized before and after each use.
4. **Blast Chiller:** For high-volume production, a blast chiller is the most efficient and controlled method. This specialized equipment uses high-velocity, cold air to rapidly cool food through the danger zone. Staff must be trained on the correct settings and operation of the blast chiller as per the manufacturer's instructions.

Monitoring and Record Keeping:

- The cooling process for every batch of high-risk food must be meticulously monitored and logged.
- The log entry must include the product name, the start time and temperature (once cooking is complete), the time and temperature after 2 hours (which must be at or below 20°C), and the final time and temperature when the product reaches 5°C.
- **Corrective Action:** If the 2-hour limit to reach 20°C is not met, the food must be immediately subjected to a rapid reheating to 74°C and the cooling process must be started again using a more effective method (e.g., smaller portions, more ice). If this is not possible or practical, the food must be discarded. This action must be documented in the log.

4.5 Safe Reheating and Hot Holding Procedures

While the majority of our bakery products are served at room temperature or chilled, certain items like savoury pastries, pies, or hot dessert sauces may require reheating or hot holding for service. These processes also have critical temperature requirements to ensure safety.

Reheating Procedure:

- **Objective:** The goal of reheating is to move the food through the Temperature Danger Zone as quickly as possible to prevent the regrowth of any bacteria.
- **Critical Limit:** When reheating a previously cooked and cooled high-risk food, its core internal temperature must reach at least **74°C within 2 hours.**
- **Approved Methods:** Reheating must be done using direct, powerful heat sources like a conventional oven, microwave, or stovetop. Hot holding equipment, such as a bain-marie or heated display cabinet, is **not** designed for reheating. These units are only powerful enough to maintain temperature, not to raise it quickly and safely. Using them for reheating is a serious breach of food safety protocol.
- **One Time Only:** A food item should only ever be reheated once. If a reheated item is not sold or used, it must be discarded. It cannot be cooled and reheated again.

Hot Holding Procedure:

- **Objective:** To keep cooked food safe for service by holding it at a temperature that prevents bacterial multiplication.
- **Critical Limit:** Once a food has been properly cooked or reheated, it must be held at a temperature of **60°C or hotter.**
- **Equipment:** Use pre-heated equipment specifically designed for hot holding. Placing hot food into a cold holding unit will cause the food's temperature to drop into the danger zone.
- **Monitoring:** The temperature of hot-held food must be checked and recorded in the appropriate log at least every 2 hours using a calibrated probe thermometer. Check the temperature in multiple spots to ensure it is heated evenly.
- **Best Practices:**
    - Keep food covered to retain heat and prevent surface contamination.
    - Stir liquids like sauces frequently to prevent cold spots from forming.
    - Do not mix fresh batches of food with old batches in the holding unit. When a batch is running low, remove the old pan and replace it with a new, clean pan containing the fresh batch. This prevents potential contamination and ensures better quality.
- **Corrective Action:** Any high-risk food that falls below 60°C for more than 2 hours must be discarded.

Module 5: Cleaning, Sanitizing & Pest Control

5.1 The Difference Between Cleaning and Sanitizing

These are two distinct but equally important processes. They are not interchangeable, and one cannot be effective without the other. Both are required for all food contact surfaces to ensure a safe environment.

- **Cleaning:** This is the physical process of removing visible matter. It involves using detergent, hot water, and physical friction (scrubbing with a cloth or brush) to remove food debris, dirt, grease, and other residues. Cleaning is what makes a surface *look* clean. It is the essential first step, but it does not effectively kill pathogenic bacteria or viruses.
- **Sanitizing:** This is the chemical or thermal process of reducing the number of microorganisms on a surface to a safe, acceptable level. Sanitizing is what makes a surface *safe*. This is done *after* a surface has been thoroughly cleaned. A surface cannot be effectively sanitized if it is not clean first, as leftover food particles and grease can act as a barrier, protecting bacteria from the sanitizer and rendering it ineffective. In our kitchen, we primarily use chemical sanitizers.

5.2 Six-Step Cleaning and Sanitizing Procedure

This detailed procedure must be followed methodically for all food contact surfaces (workbenches, tables), equipment (mixers, slicers), and utensils (knives, bowls, spatulas).

1. **Pre-Clean (Scrape):** Before introducing water, remove all loose and large food debris from the surface. Scrape them directly into a designated waste bin. This step makes the washing process more effective and keeps the wash water cleaner for longer.
2. **Main Clean (Wash):** Wash the surface thoroughly with hot water and the approved food-safe detergent. Use a clean, designated cloth, brush, or scourer. Apply vigorous scrubbing to dislodge all adhered food residue and grease. For complex equipment like mixers, this may involve disassembly to clean individual parts.
3. **First Rinse:** Rinse the surface completely with clean, hot water to remove all traces of the detergent and any loosened dirt. If detergent residue is left behind, it can inactivate the chemical sanitizer in the next step.
4. **Sanitize:** Apply the approved food-safe chemical sanitizer to the clean surface. This can be done via a spray bottle or by submerging items in a sanitizing solution. Two critical factors must be observed:
    - **Correct Concentration:** The sanitizer must be diluted with water to the precise concentration specified by the manufacturer. Test strips should be used periodically to verify the concentration of sanitizing solutions.
    - **Required Contact Time:** The sanitizer needs time to work. The required contact time (e.g., 30-60 seconds) will be stated on the product label and must be adhered to. Wiping the sanitizer off immediately will render it useless.
5. **Final Rinse (If required):** Some chemical sanitizers require a final rinse with clean, potable water to remove any chemical residue that could taint food. Check the product label. If it is a certified "no-rinse" sanitizer, this step can be omitted, which is often preferred to avoid potential re-contamination from the rinse water.
6. **Air Dry:** Allow the surface or equipment to air dry completely. Do not use a cloth or tea towel to dry it. Re-used cloths are a major source of cross-contamination and will reintroduce bacteria to the freshly sanitized surface. Store freshly cleaned items upside down on a clean rack to allow for drainage and drying.

5.3 Management of Cleaning Chemicals

The improper use, storage, or handling of cleaning chemicals poses a significant risk of acute chemical contamination of food, which can cause severe illness. All chemicals must be treated with respect and handled according to strict protocols.

- **Approved Chemicals:** Only cleaning and sanitizing chemicals that have been approved by management are permitted on the premises. These chemicals are selected for their effectiveness and their certification as food-safe for use in a commercial kitchen environment. Unauthorized, domestic cleaning products are strictly forbidden.
- **Designated Storage:** All cleaning chemicals must be stored in a designated, locked chemical storage area. This area must be physically separate from all food storage and preparation areas to eliminate any possibility of leaks, spills, or fumes contaminating food.

- **Original Containers:** Chemicals must always be kept in their original, clearly labeled containers from the manufacturer. It is strictly prohibited to transfer chemicals into unmarked containers, especially old food or drink bottles, as this can lead to catastrophic accidents.
- **Safety Data Sheets (SDS):** A binder containing the Safety Data Sheets (also known as COSHH sheets in some regions) for every chemical used on-site must be kept in a designated, accessible location (e.g., the manager's office). All employees must know where this binder is. The SDS contains vital information on chemical composition, hazards, safe handling, required PPE, and first aid procedures in case of accidental exposure.
- **Dilution and Use:** Always follow the manufacturer's instructions for the dilution, application, and contact times of all chemicals. Using a chemical that is too weak will be ineffective at sanitizing. Using one that is too strong can be toxic, damage equipment, and leave harmful residues. Use designated, colour-coded measuring jugs and spray bottles for diluting and applying chemicals to prevent mix-ups.
- **Personal Protective Equipment (PPE):** Wear appropriate PPE, such as heavy-duty rubber gloves and safety glasses or goggles, when handling concentrated chemicals, as specified by the SDS. This protects you from chemical burns and splashes.