



iMIS Food

Security Program

Training

Join the Food Security Program to boost Food Safety and local prosperity in emerging countries.

Part 1: Introduction

- Food Safety Compliance
- HACCP introduction
- Methodology
 - Prerequisite program
 - Control measures
- Good Manufacturing Procedures
- HACCP study: specific hazards
- HACCP study: decision tree, raw materials and processes
- Our company: HACCP
- Legislation
 - EU regulations & Information sheets & Recall
 - Food Safety Authority

Introduction

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In which field
do we operate?



Food Management:

- Dynamic playing field
 - 2000 quality requirements
 - 100 suppliers
 - 100 customers
 - 100 employees
 - 400 legislative changes



Legislation: HACCP

- Hazard analysis
- Overview of pathogens, chemical hazards
 - Pathogenic bacteria
 - Mycotoxins
 - Other biotoxins
 - Viruses, ricketts and prions
 - Parasites & Pests
 - Chemical & Physical
 - Zoonoses & Extensive Toxins
 - Spoilers

- Hazard analysis
 - Control of raw material hazards
 - Process hazard management
 - HACCP-team
 - Decision tree
 - Control measures



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HACCP



Analysis: Physical hazards

- Physical hazards usually involve foreign substances such as metal particles, glass, bones, or stones that can cause cuts in the mouth, break teeth, cause choking, or perforate the gastrointestinal tract.
- This includes various materials such as those originating from land, animals, glass objects, metal objects etc. With respect to chemical and biological hazards, physical hazards are often visible and can be felt.



Analysis: Chemical hazards

- Chemical hazards include substances that adversely affect health, because they are acutely dangerous or because they cause damage in the long term. The following types of substances should be considered:
 - Substances of natural origin,
 - (Agricultural) chemicals,
 - Environmental pollution.



Analysis: Biological hazards

- When making an inventory of the biological hazards, it is important to identify those factors and microorganisms that play a role in the occurrence of food spoilage, food infection, and food poisoning. The presence and occurrence of microorganisms in food is determined by three factors, namely:
 - Factors determining the “introduction” (sources).
 - Factors influencing the growth of microorganisms (conditions).
 - Factors by which microorganisms are killed (processes).



Biological hazards:

Bacteria

- Examples of infectious pathogens:
Campylobacter jejuni, *Salmonella*,
Shigella, *Escherichia coli*, *Vibrio cholerae*, *Vibrio parahaemolyticus*,
Listeria, etc.
- Examples of toxigenic pathogens:
Bacillus cereus, *Clostridium botulinum*,
Clostridium perfringens, *Staphylococcus aureus*, fungi, etc.



Biological hazards:

Viruses

- Small round structured viruses (SRSV's) appear to be the main cause of food-related viral infections.
- The food-related infections are mainly caused by people contaminating ready-to-eat food.



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Methodology

- Firstly, the prerequisite program (PRP) must be completed.
- The entire food safety plan is based on a prerequisite program, followed by HACCP-based procedures.
- In the HACCP study, specific hazards are related to the raw materials and the processes.
- For the purpose of clarifying generic hazards that are reduced to an acceptable level by means of the PRP, an additional control measure table has been drawn up to also operationalize the PRP in procedures.
- This is not necessary according to the principles of HACCP.
- The hazard analysis is based on the Codex Alimentarius, scientific documents and legal texts.
- The hazard analysis has been drawn up per process step and per product (raw material, admixture, end products). This involved looking at microbiological, chemical, and physical hazards. All this according to the likelihood and consequence principle.

Prerequisite program

- Prerequisite program
- Reference: Codex Alimentarius, 'General Principles of Food Hygiene' CAC/RCP 1-1969, Rev. 3, 1997, Amended 1999.

Prerequisite program (1/6)

- 2. Establishment: design and facilities
 - 2.1.1 Establishment
 - 2.1.2 Equipment
- 2.2 Premises and rooms
 - 2.2.1 Design and layout
 - 2.2.2 Internal structures and fittings
 - 2.2.3 Temporary / mobile premises, vending machines
- 2.3 General
 - 2.3.1 Food control and monitoring equipment
 - 2.3.2 Containers for waste and inedible substances
- 2.4 Water supply
 - 2.4.1 Drainage and waste disposal
 - 2.4.2 Cleaning
 - 2.4.3 Personnel hygiene facilities and toilets
 - 2.4.4 Temperature control
 - 2.4.5 Air quality and ventilation
 - 2.4.6 Lighting
 - 2.4.7 Storage

Prerequisite program (2/6)

- 3.1 Control of food hazards
 - 3.2.1 Time and temperature control
 - 3.2.2 Specific process steps
 - 3.2.3 Microbiological and other specifications
 - 3.2.4 Microbiological cross contamination
 - 3.2.5 Physical and chemical contamination
- 3.3 Incoming materials requirements
 - 3.3.1 Specifications
 - 3.3.2 Control at reception
 - 3.3.3 Stock rotation
- 3.4 Packaging
 - 3.4.1 Design and materials
 - 3.4.2 'Food-grade' materials and gases
 - 3.4.3 Reusable packaging
- 3.5 Water
 - 3.5.1 Water in contact with food

Prerequisite program (3/6)

- 3.5.2 Reuse of re-circulated water
- 3.5.3 Reuse of re-circulated, non-treated water
- 3.5.4 As an ingredient
- 3.5.5 Ice and steam
- 3.6 Management and supervision
 - 3.6.1 Type of control and supervision
 - 3.6.2 Knowledge required
- 3.7 Documentation and records
 - 3.7.1 Retain records
 - 3.7.2 Effectiveness and credibility
- 3.8 Recall procedures
 - 3.8.1 Effective procedures
 - 3.8.2 Tracing & Tracking
 - 3.8.3 Destroy or reprocess

Prerequisite program (4/6)

- 4 Establishment: maintenance and sanitation
 - 4.1 Maintenance and cleaning
 - 4.1.1 General
 - 4.1.2 Cleaning procedures and methods
 - 4.2.1 Specifications
 - 4.2.2 Monitoring and verification
 - 4.3 Pest control
 - 4.3.1 General
 - 4.3.2 Preventing access
 - 4.3.3 Harborage and infestation
 - 4.3.4 Monitoring and detection
 - 4.3.5 Eradication
 - 4.4 Waste management
 - 4.4.1 Removal, storage
 - 4.4.2 Cleaning
 - 4.5 Sanitation systems
 - 4.5.1 Monitoring
 - 4.5.2 Verification
 - 4.5.3 Review

Prerequisite program (5/6)

- 5 Establishment: personal hygiene
 - 5.1 Health status
 - 5.1.1 Access prevention
 - 5.2 Illness and injuries
 - 5.2.1 Conditions to be reported
 - 5.3 Personal cleanliness
 - 5.3.1 Protective clothing
 - 5.3.2 Cuts and wounds
 - 5.3.3 Washing hands
 - 5.4 Personal behavior
 - 5.4.1 Smoking, eating, sneezing
 - 5.4.2 Jewelry
 - 5.5 Visitors
 - 5.5.1 Cleanliness and behavior

Prerequisite program (6/6)

- 6 Transport
 - 6.1 General
 - 6.2 Requirements
 - 6.3 Use and maintenance
- 7 Product information and consumer awareness
 - 7.1 Batch identification
 - 7.2 Product information
 - 7.3 Labelling
 - 7.4 Consumer education
- 8 Training
 - 8.1 Awareness and responsibilities
 - 8.2 Training programs
 - 8.3 Instruction and supervision
 - 8.4 Refresher training

Prerequisite program Example

Standard	Standard text	Included in	Argumentation
2. Furnishing: design and facilities			
2.1.1 Device	<p>2.1.1.1 Establishments may not be located in places where it is clear that they pose a threat to food safety. In particular, establishments will normally be located at a distance from:</p> <ul style="list-style-type: none"> • Contaminated sites and industrial activities that pose a serious risk of contamination of foodstuffs. • Areas exposed to flooding unless adequate safety measures have been taken. • Areas contaminated by pests or plant diseases, or where this is likely to be the case. • Sites whose waste, both solid and liquid, cannot be adequately removed 	Environment	The company is so structured that the environment does not adversely affect the safety of products, buildings and personnel
2.1.2 Equipment	<p>2.1.2.1 The equipment/material shall be arranged in such a way that it can be:</p> <ul style="list-style-type: none"> • Used and cleaned effectively. • Functions in accordance with the intended use. • Enables good hygienic application, including monitoring. 		Meets the set requirements. All the material is easy to clean and intended for use. This is assessed during the internal audit and quick scan.
2.2 Buildings and premises			
2.2.1 Design and layout	2.2.1.1 Where appropriate, the indoor design and layout shall allow for good hygiene practices, including protection against harmful cross-contamination/contamination		Meets the set requirements. This is assessed during the internal audit and quick scan.

Prerequisite program Controls

The PRPs list shows various possible hazards and points of attention. The applicable aspects are governed by procedures, instructions and the associated measures. Based on the fact that they originate from the PRPs or that the PRPs have given rise to the preparation of these measures, they are not guided by the decision tree. The following measures are in force within our company and are assessed at least annually or in the event of a new risk or an incident with food safety or food defense.

Danger from PRP	Control by	Standard	Action in case of deviation	Procedure /Instruction
Cross-contamination with pathogens towards products with a risk of disease.	Proper personal hygiene prevents cross-contamination.	Everyone must comply with the applicable regulations.	Re-instruction staff, address staff. Block products at extremes.	<i>Procedure: hygiene</i> <i>Instruction: hygiene control</i>
Cross-contamination with pathogens or dangerous substances due to poor industrial hygiene in the broad sense of the word with a risk of disease.	By monitoring company hygiene, cross-contaminations are prevented.	Everyone must comply with the applicable regulations.	Re-instruction staff, address staff. Block products at extremes.	<i>Procedure: industrial hygiene</i> <i>Instruction: hygiene control</i>
Pest droppings, food, etc. Pests can be carriers of pathogens with a chance of disease.	Good pest control, entrance control and weekly check for accumulation of waste /food.	Not unanimated.	Additional control applications. Instruction staff. Structural adjustments.	<i>Procedures: pests and entrance control</i> <i>Instructions: hygiene control, pest control and entrance control</i>

Good Manufacturing Procedures

- Covid 19
- Complaints
- Documentation
- Education and training
- Entry Check
- Cleaning
- Allergen management Foreign Materials
- Glass and hard plastic
- Labeling and packaging check
- Maintenance
- Pest Control
- Recall
- Traceability
- Visitors
- Food Defense

Company Protocol for Coronavirus COVID-19

Good Manufacturing Procedures

Measures to prevent the spread of coronavirus

- If you have a cold, cough, sore throat, or fever, stay home. Avoid social contact.
- Keep an eye on your health, if you get a cold or increase to 38 degrees Celsius, you stay home to recover from the sickness and to not infect others.
- You can call the doctor if you get a fever (more than 38 degrees Celsius) and cough or if your breathing becomes increasingly difficult.
- If you have been in contact with people who are infected or have been in a risk area, then stay extra alert.
- When can you go back to work: If you have the above complaints, you should stay at home until you have one day without coughing and you don't have a fever. If family members still have complaints, you may return to work if you have not coughed for one day and have no fever.
- Even if you have no complaints, work from home as much as possible or try to spread your working hours.
- Do not attend trade fairs, events, gathering, or other places where many people gather.
- Visitors to our company are prohibited, visitors are only allowed for urgent or emergency situations.
- Consultations and meetings held by telephone, video calling, and etc. as much as possible. This also applies to internal consultation or otherwise only with a small group with due observance of the hygiene measures below.

Hygiene measures to be observed:

- Wash your hands regularly and thoroughly with water and disinfectant soap and / or gel.
- Dry well with paper (on a roll or towels) or air dryer. These dryers must be thoroughly cleaned and disinfected at least every day.
- Cough and sneeze into the inside of your elbow.
- Use tissue paper and wash your hands afterwards.
- Don't shake hands.

Complaints

Good Manufacturing Procedures

Anyone dissatisfied with our goods or services has the right to complain. Complaints might come from our consumers or from inside. Food safety complaints are documented.

- We have a duty to resolve all complaints received, within reason.
- All complaints must be treated seriously.
- All complaints are recorded on the form.
- Complaints must, if possible, be dealt with within 5 working days.
- If possible, preventive and / or corrective measures should be taken to prevent recurrence.
- The damage suffered must be compensated as much as possible in the case of valid complaints.
- All complaints shall be in writing and / or handled by telephone with the complainant.
- All complaints will be used for trend analysis.
- If it appears from the trend analysis that structural problems are occurring, then measures will be taken in order to resolve these structural complaints. This may be through changes in process and / or product.
- A root cause analysis must only be conducted by a significant rise in the total complaints or serious complaints (food safety).

How to record and register is outlined in this step-by-step. The quality manual is digitally stored in iMIS. Every change is tracked in the system, so it would be easy to compare to earlier versions. Login codes with passwords and authorizations control who can see or edit documents. Daily electronic backups keep papers safe. The following types of documents are included in our digital handbook:

Documentation

Good Manufacturing Procedures

- Procedure: Cross-departmental activities are recorded in a procedure. A procedure contains the steps that must be followed by different departments to achieve the desired end result.
- Instructions: An instruction states how an action must be carried out within the department.
- Form: A form is intended as an information carrier and serves as a means of communication between the different department.
- Specifications: The determined constants are recorded here. Specifications are intended for reference.

Education and Training

Good Manufacturing Procedures

Training

All employees in our organization must have the necessary training, education, or experience. This may be achieved by external or internal training. Management must retrain or educate employees who are not appropriately trained or educated. The training requirement is set annually.

MIS Audit Control Rounds:

Once per month the personnel knowledge check is performed to check if all employees have enough knowledge of, among other things:

- Company rules
- Hygiene rules
- HACCP
- Employee health and safety

Entry Check

Good Manufacturing Procedures

1. Only receive deliveries from approved suppliers.
2. Only receive products for which approved product specifications are present.
3. Only receive products signed terms of delivery.
4. The driver may only load / unload after the means of transport has been registered.
5. The driver must have clean hands and wear clean clothes.
6. The driver must comply with the iMIS external rules.
7. The recipient checks the delivery for:
 - a. Order quantity
 - b. Temperature (where needed)
 - c. Transport conditions
 - d. Driver care
 - e. Packaging
 - f. Labeling
 - g. Pests
8. This is done in accordance with the entry check form.
9. The temperature is measured with a calibrated thermometer. This thermometer is disinfected before and after use.
10. All audit findings, corrective actions, and comments must be noted on the entry check form.
11. The delivery is also assigned a tracking number.
12. If necessary, a process sample is taken from the delivery and a process sample number is assigned to it.
13. This procedure also applied to returns (products received by the customer). Only returns from EC approved companies may be received.
14. This procedure also applies to pre-printed labels. These must be checked against the product specification with each delivery.
15. This procedure also applies to outsourced production and packaging activities.
16. This procedure also applies to products stored outside; the must not be affected.

Foreign material

Good Manufacturing Procedures

Glass, hair, grime, peeling paint, injection needles (meat), insects, and other physical contaminants may contaminate food products. Physical contaminants come from building materials, employees, and badly maintained buildings and equipment. Foreign bodies are all materials that do not naturally belong in food. These

Cleaning

Good Manufacturing Procedures

To prevent the accumulation of, and cross infection with, filth and micro-organisms, good cleaning and disinfection is of great importance. Most cleaning operations are outsourced to a specialized company to ensure the proper cleaning and disinfection. Small daily cleaning operations are conducted by our own staff. There is an agreement made with the cleaning company, where our requirements are recorded. The employees of the cleaning company must hold to our hygiene rules. All employees of the outside company have:

- Health declaration;
- Signed hygiene requirements;
- Proof of qualification;
- Responsibilities.

Of the used cleaning products and disinfectants, the necessary specifications are available (MSDS and product information pages with intended use, recommended dosage, pH, and etc.) For cleaning, the departments must be broom clean and the machines dismantled. All production areas are cleaned and disinfected according to fixed schedules. These schedules are recorded in the specifications. The cleaning rules for processing equipment, food contact surfaces, and room cleaning inside high care / risk areas must contain minimal:

- Responsible;
- Item / area that must be cleaned;
- Cleaning frequency;
- Method of cleaning, including dismantling equipment on which cleaning activities must be performed.
- Cleaning solutions and concentrations;
- Cleaning materials;
- Cleaning record and cleaning verification.

Allergen Management

Good Manufacturing Procedures

Cross-contamination of allergens or unintended presence of allergens (not declared on the label) can be caused by, for example:

- Presence in raw material, while this is not mentioned in the raw material specification.
- Use of the wrong recipe or incorrect execution of the recipe.
- Incorrect labelling or use of the wrong label or packaging.
- Inadequate cleaning.
- Wrong planning sequence.
- Cross-contamination by employees (hands, clothing, footwear).
- Broken or open the packaging.
- Accumulation via aids, equipment, machines, internal means of transport, crates, buckets, shovels, measuring instruments, etc.

Accumulation through the air (including ventilation system) or water.

Accumulation via tools of maintenance technician.

With the risk analysis about cross-contamination or carry-over of allergens, the account is taken of:

the physical state of the allergens (for example, in powder form, sticky substance, or particle size).

potential places in the process where cross-contamination can occur.

Glass and hard plastic

Good Manufacturing Procedures

Consumption of products containing glass shards or hard plastic might result in injury. Our organization identifies this physical danger from other physical hazards by using the glass method and the iMIS Audit. The product may include numerous types of glass..

The measures taken to prevent glass breakage are:

- Covering the fluorescent lights;
- Covering the windows with foil;
- Keep as much glass and hard plastic out of the production areas as possible;
- Checks via iMIS Audit patrol.

Labeling and packaging check

Good Manufacturing Procedures

The check includes checking:

The assigning of the correct packaging material, that the correct packing material is at the packing machine for immediate use and check, with preprinted packaging material, that only the properly printed packaging materials are present at the correct packaging machine. that when a product is changed, the packaging material is also removed from the line, so that only the packaging material that is used is present at the line. These checks are registered.

The check is carried out:

- At the start of the packaging;
- During packing;
- When changing batches of packaging materials;
- At the end of every production.

The check also includes a verification of whether any printing that takes place during the packaging process is correct. Possible prints are:

- Date coding
- Batch coding
- Quantity indication
- Pricing information
- Bar code
- Country of origin
- Allergens

Maintenance

Good Manufacturing Procedures

For all the processes to proceed properly, maintenance is essential. Maintenance is in the form of both preventative maintenance and adhoc maintenance:

- Preventive maintenance: lubricate bearings, small turn machines.
- Adhoc maintenance: immediately necessary repairs

Preventative maintenance is recorded in a schedule. Maintenance through external parties is laid down in the contracts. Maintenance on new machines is predetermined by the validation. In all cases it applies that maintenance takes place outside production hours as much as possible. When maintenance must be performed during production, possible product cross contamination must be considered. All maintenance performed is recorded, at minimum:

- Committed maintenance;
- Reason for maintenance;
- Reason for failure;
- Taken measures;
- Any emergencies during maintenance.

Pest Control

Good Manufacturing Procedures

Pests can pose a threat to the safety of our products. In order to prevent pests, we use an external specialist company. There are also various internal controls in place to prevent potential contamination with pests. The frequency of the check is based on the risk. The plan is revised yearly or in the case of an infestation or significant changes in the building, process, product, or surroundings.

Outsourced Pest Control: We have outsourced pest control to a specialist company. They possess the necessary expertise for the pest control to work properly and must comply with all relevant legislation regarding training and registration of their activities and competences.

Internal Pest Control: To avoid pests there are various internal controls in place. Entry control: By entry control, our products are examined for possible pests. If pests are present, the delivery will be refused. Hygiene Monitoring: During the various checks in the company, we looked at:

- The presence of excrement and pests.
- Dirt accumulation.
- Possible shelters by incorrect storage.
- Structural state and possible cracks to the outdoors.

Recall

Good Manufacturing Procedures

Recall

It is essential to strictly follow this recall procedure in case of calamities (illness, death of customers, safety aspects).

Report from the customer

If it appears that someone reports sick customers or the death of customers, the person must immediately transfer to the quality service. When internal abnormalities are found, this is taken to the quality service. If there is no answer, always contact the management.

Traceability

Good Manufacturing Procedures

Traceability applies to used raw materials, additives, end products, packaging materials, and rework i.e., waste and disapproval. This also applies to products used for product development and possible test products. According to the General Food Law, it is required for each foodstuff business' product to be traceable. In the Guidance (Article 18) it is stated that the company must know which supplier delivers / has delivered what raw materials, including quantity and delivery days. The company must also know which customer received what product and how much. Besides the required traceability from the General Food Law, we conform to the tracing requirements from the certified standards. The actual operation of this system is described in the tracing test report. The full tracing can be complete in 4 hours.

Visitors

Good Manufacturing Procedures

It is forbidden for unauthorized people to enter the production areas. People with permission (visitors) must adhere to the company rules. To this end, they must be kept under supervision and sign in. Visitors are signed in with the registration form (visitors list).

Visitors that have been in contact with, or suffer from, contagious diseases or other sickness that post a threat to food safety may not enter the production areas.

Visitors are not allowed to enter the production area(s) without overclothes and must have at least:

- Wear a white overcoat (may also be a new plastic / disposable one);
- Wear a hat that covers all hair;
- Wear blue shoe protectors (unless visitors walk through the sole cleaner) or footwear provided by the company;
- Take of jewelry and watches;
- Wash and disinfect hands.

Food Defense

Prerequisite program

Appropriate measures have been taken in our company for food defense. With the company security procedure, recall procedure, and HACCP team sessions we are continuously prepared and ready for food defense. In the event of sabotage, evacuation, etc. the following points direct our company:

- Management
- Human factors
 - Employees
 - The Public
- Business operations

Good Manufacturing Procedures

Company signs

Technical department

Instruction 1: Maintenance

- 1.1 During maintenance within the company building e.g. machine maintenance, cleaning and replacement of glass, all products in the immediate area of the maintenance must be safely covered or removed.
- 1.2 If maintenance takes some time, all products must be placed (back) in the relevant refrigerators or freezers.
- 1.3 Within the company only food grade (edible) lubricants are allowed for lubricating machinery, etc.
- 1.4 In all places where machinery lubricants are used, and where there is a risk that these may come into contact with the product, its rotating parts are shielded by means of plastic seals.
- 1.5 Maintenance according to service contracts are always registered.
- 1.6 Explicit repairs must be announced with the repair order form.
- 1.7 Logbooks should be kept of all the machines.
- 1.8 Explicit attention should be paid to glass.

Instruction 2: Programming machines

- 2.1 The programming of the machines of our company is done in consultation with the management. These special adjustments are company secret.
- 2.2 Equipment which is present in our company is adjusted to the product composition. If a device is purchased it therefore must be adjusted to the products that the company conducts.
- 2.3 If necessary, the equipment must be adjusted first before it can be used. This to guarantee product safety, quality and compliance.
- 2.4 If during installation a failure or maintenance takes place, the products must be thoroughly checked for defects to the product.
- 2.5 If the defects repaired they are checked and may be released.
- 2.6 If the shortcoming is seriously the product must be destroyed.

Good Manufacturing Procedures

Rules outside

- 1 Turn engine off
- 2 Ring doorbell
- 3 Immediate loading / unloading
- 4 Do not eat, drink
- 5 Hygienic loading and unloading
- 6 No jewellery
- 7 No smoking
- 8 Drive away with closed door

Hygiene Rules for visitors and (external) mechanics

Before entering the production area you must be informed of the applicable hygiene regulations

- 1 The production area should only be entered after permission and under the supervision of an assigned employee.
- 2 Do not wear jewellery (watches, necklaces, rings, earrings).
- 3 Clothing must be covered till below the knee.
- 4 Hair should be covered completely.
- 5 Wear prescribed clothing and footwear.
- 6 Do not use heavy make-up or perfumes.
- 7 Wash hands before entering the production area.
- 8 It is not allowed to eat (including medications), drink or smoke.
- 9 Avoid contact with foodstuffs.

Additional rules for mechanics

- 10 You shall not commit maintenance or repairs in the direct vicinity of foodstuffs. If repairs are required, first call the production manager so that all foods can be adequately protected against product contamination.

Hygiene rules personnel

Hand washing

With our hands we hold tools, we process products, use packaging materials and we turn the doorknob of the toilet. Our hands are an important potential source of contamination. Wash and disinfect your hands therefore:

- before starting work
- before and after each break
- after each toilet visit
- when changing department
- when transferring from an unclean area (such as toilets, canteen, offices and technical workshop) to a clean area (such as production areas and warehouses).

Note: wearing plastic gloves is not sufficient. These gloves should be regularly washed or replaced (herewith simultaneously clean your hands).

Clean headwear

Hairs are distasteful, they often contain microorganisms. During the day we lose hair. Wearing a hat is essential.

Clean clothing

On the company you put on your work clothes. This avoids the entry of "street dirt" in the production areas. Of course you make sure that you put on clean working clothes.

Clean boots / shoes

Your boots or shoes are dirt carriers. Avoid the spreading of dirt, when switching from unclean to clean areas, by carefully brushing.

Plasters on wound surfaces

Cover wounds with prescribed (metal detectable) plasters.

Cross-contamination

Cross-contamination is the transfer of microorganisms from dirty to clean products, from infected to uninfected products, dirt tool clean products etc. Therefore clean not only your hands but also your resources as gloves, tools, measuring instruments, etc. Avoid cross contamination!

Eating (including medications), drinking or smoking

Eating, drinking and smoking on the work floor is prohibited. The risk of contamination of products is much too high.

Jewellery, nail polish, heavy make-up and perfume

Jewellery should not be worn during work. Jewellery are unsafe for yourself and the product. Nail polish is not permitted. It can peel and thereby contaminate the product, moreover you can't see if there's any possible dirt under your nails. Do not use heavy make-up or perfume.

Garbage

Dispose garbage always in the correct (for this purpose provided) bin.

Remember that hygiene does not end when production stops.

Good Manufacturing Procedures

Overview rules in production areas

- Completely cover hair
- Do not eat (also no medicines), drink or smoke
- Report diarrhea or illness
- Work clothes on, all buttons closed
- Wear clean footwear
- Prohibited to take medication into the production area
- Frequently change or wash gloves when working with unpacked product
- No jewellery (smooth wedding ring allowed)
- Wash hands
- Report wounds or infections
- No suitcases / bags and external writing materials allowed in production

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Company Hygiene

The following rules shall apply

Hygiene

- Keep the department clean and tidy.
- Do not place product directly on the floor.
- Do not place materials directly on the floor which thereafter can cross-contaminate the product.
- All products should be covered when not in use.
- Avoid cleaning when product is present as much as possible. If there is no other possibility: cover product good, place product far away and do not spray in the direction of the product.
- Wood and cardboard (unnecessarily) in the production areas should whenever possible be avoided.
- Do not put crates, buckets etc. on the ground, but on trolleys, roll containers or plastic pallets.
- Cover products during breaks and (temporary) storage with plastic foil.
- Crates and containers must not be put together as this may cause cross contamination (no crates on open product).
- When packing material is present in the production area, and not used, it should be protected against contamination and as quickly as possible to be stored in the right place.

Other

- Cleaning products and chemicals should always be encoded with the content.
- These products may only be used by trained and designated personnel.
- These products should be stored immediately after use at the prescribed place and should never stand beside uncovered product.
- Keep doors closed as much as possible to prevent temperature fluctuations and to save energy.
- In case of critical allergens there should be strictly acted. Especially with the introduction of peanuts, the whole company must be alert to the possible severe allergic reactions of consumers (such as hives, Oedema or anaphylactic shock).
- Staples, paper clips and snap-off blades are not allowed in the production areas.

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Goods receiving

- Only receive deliveries from approved suppliers.
- Only receive products, of which approved specifications exist.
- Only receive products under signed supplier conditions of our company.
- The driver may only load / unload, after the vehicle has been signed in.
- The driver and vehicle should comply to our requirements regarding hygiene.
- The driver must comply with the applicable outside rules.
- The receiver checks the delivery on:
 - Order quantity
 - Temperature
 - Transportation Conditions
 - Personal care driver
 - Packaging
 - Labeling
- The temperature requirements in the goods receiving form must be complied.
- This temperature can optionally be measured with a thermometer, which is disinfected before and after use.
- All audit observations, corrective actions and comments must be recorded on the goods receiving form.
- Also the delivery is recorded in the internal traceability system.
- If necessary, a process sample of the delivery can be taken.

www.qassurance.com

Our company

Question 1: How does the Prerequisite program look like for our company?

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FOOD GROUP

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Methodology specific hazards

- In the HACCP study, specific hazards are related to the raw materials and the processes.
- The hazard analysis is based on the Codex Alimentarius, scientific documents and legal texts.
- The hazard analysis has been drawn up per process step and per product (raw material, admixture, end products). This involved looking at microbiological, chemical and physical hazards. All this according to the likelihood x consequence principle.

Introduction

- Food Safety Compliance
- HACCP introduction
- Methodology
 - Prerequisite program
 - Control measures
- Good Manufacturing Procedures
- **HACCP study: specific hazards**
- HACCP study: decision tree, raw materials and processes
- Our company: HACCP
- Legislation
 - EU regulations & Information sheets & Recall
 - Food Safety Authority

HACCP study: specific hazards

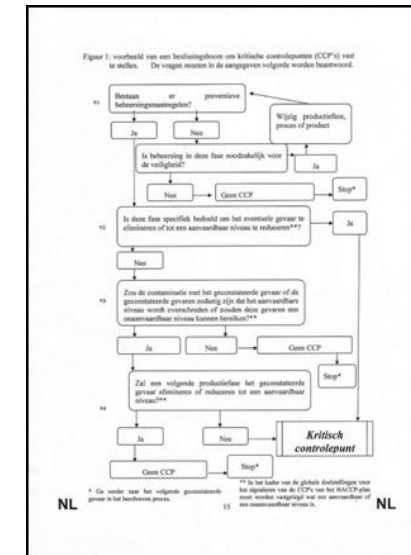
- Hazard analysis
- Overview of pathogens, chemical hazards
 - ✓ Pathogenic bacteria
 - ✓ Mycotoxins
 - ✓ Other biotoxins
 - ✓ Viruses, ricketts and prions
 - ✓ Parasites & Pests
 - ✓ Chemical & Physical
 - ✓ Zoonoses & Extensive Toxins
 - ✓ Spoilers

- **Specific hazards: Codex approach**

- ✓ Raw materials and info sheet 64/65/85
- ✓ Processes

- **HACCP approach validated weekly in audits and part of the iMIS Food Updates.**

- Hazard analysis
 - ✓ Control of raw material hazards
 - ✓ Process hazard management
 - ✓ HACCP-team
 - ✓ Decision tree
 - ✓ Control measures



HACCP study: specific hazards background information

iMIS Food Legislation

Legislation

- iMIS Food Legislation
 - Bad Bug Book FDA
 - Codex Alimentarius
 - EFSA Journals
 - ENG Consolidated Regulations
 - ENG IMIS Food categories
 - ENG IMIS Hazards
 - ENG IMIS Hazard tables
 - ENG IMIS Product Groups
 - ENG IMIS Status Food Safety
 - FAO Documents
 - Food Safety Authority of Ireland
 - Forms
 - FSA UK Documents
 - Consolidated Regulations
 - Old Consolidated Regulations
 - iMIS Food HACCP training material
 - traded Hazards
 - iMIS Hazard tables**
 - Chemical
 - Physical
 - Mycotoxins
 - pests
 - Other biotoxins
 - parasites
 - Pathogenic bacteria
 - Viruses, ricket and prions
 - Zoonoses (Not relevant for Fo)

iMIS Food Legislation

Legislation

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 - Forms
 - FSA UK Documents
 - Consolidated Regulations
 - Old Consolidated Regulations
 - iMIS Food HACCP training material
 - traded Hazards
 - iMIS Hazard tables
 - iMIS Product groups
 - NVWA expertise statements
 - NVWA Food Additives Handbook
 - NVWA Food labeling manual
 - NVWA Novel Food Handbook
 - NVWA Nutrition and Health Claim
 - NVWA Food Safety Handbook
 - NVWA Information Sheets
 - NVWA Knowledge Sheets**
 - 3-Monochloropropandiol-1,2
 - 4-Hexylresorcinol (4-HR)
 - Acrylamide

NVWA Knowledge Sheets

Bron; VOICE

NVWA knowledge Sheets

- 3-Monochloropropandiol-1,2
- 4-Hexylresorcinol (4-HR)
- Acrylamide
- Abbreviations
- Aflatoxin
- General Allergens - Food Allergy and Food Intolerance
- General crop protection products
- General Marine Toxins
- General mycotoxins
- General vitamins
- Aluminium
- Arsenic
- Azaspic acid poisoning (AZP)
- Bacillus cereus
- Bacillus seleniformis
- Bacillus subtilis
- Bacterial poisonings and infections
- Barium
- benzene
- Bioterrorism, Biological Agents with Guidance
- Assurance of food safety in the food chain regarding the dangers associated with the purchase of ready-to-eat products
- Brucella melitensis
- Butyl Hydroxy Anisole (BHA)
- Cadmium
- Campylobacter spp.

Risk determination method

Systematics Statement

Risk analysis statement (based on: Probability x Severity = Risk)

Probability:

Probability level 0 = there is no danger or the danger is not (yet) known

probability level 1 = the reality that a hazard can occur

Severity:

Severity level 0 = no danger to public health

Severity level 1 = any known threat to public health

Risk:

By combining the probability with the severity, the degree of risk can be determined, see table below PROBABILITY x SERIOUS = RISK

Probability ▼

1	No risk	Risk
0	No risk	No risk
Severity ►	0	1

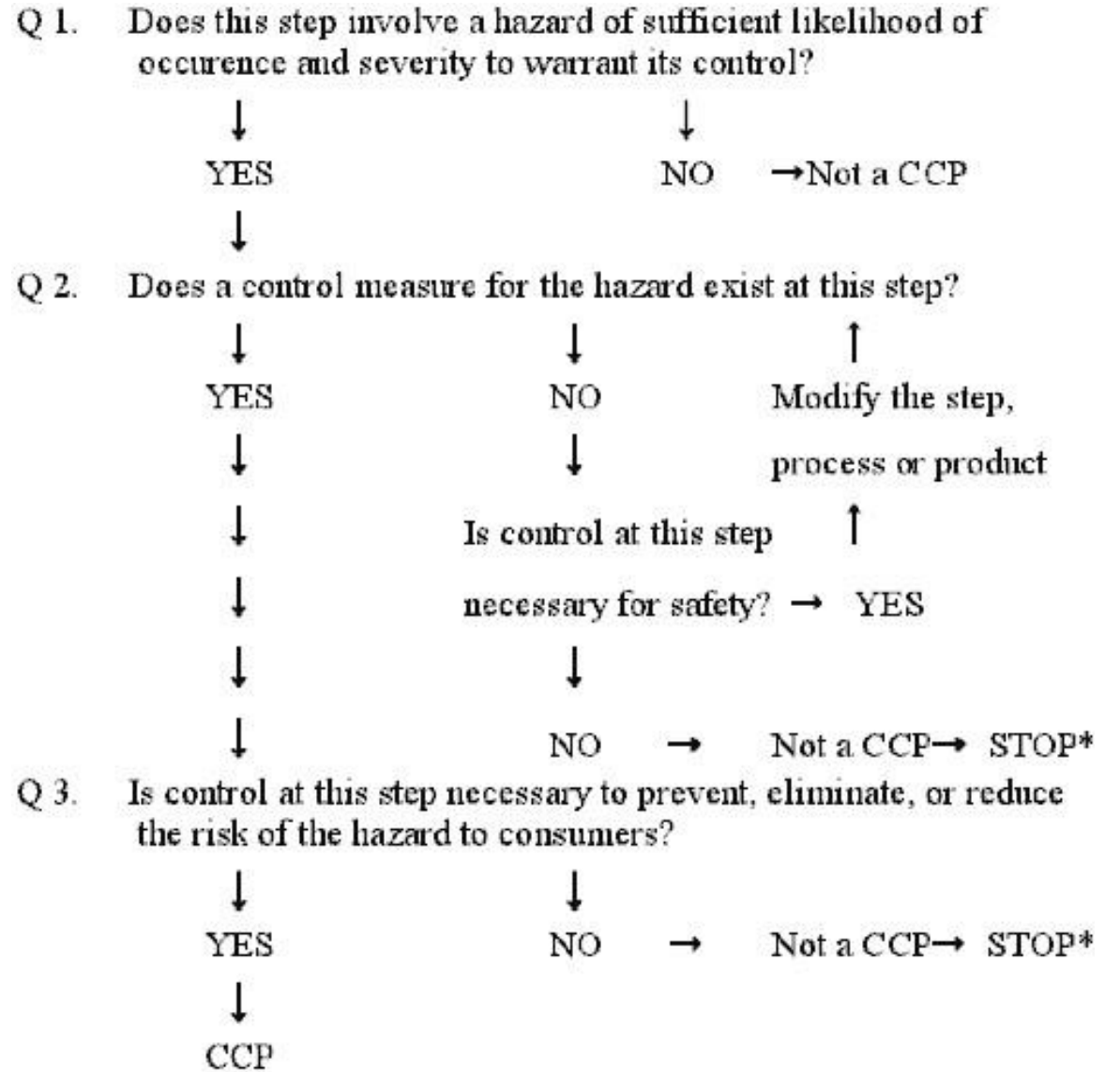
Red – CCP

Green – no risk

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Decision tree



HACCP study: raw materials and processes

Raw material	Hazard	Type of Hazard	Cause	Potential effect	Probability to occur	Risk = probability x potential effect	Control measure	Is control of this risk necessary?	Is this phase specifically intended to eliminate the potential hazard or	Would the contamination with the identified hazard be such that the	Will a subsequent production phase eliminate the identified	CCP: Critical control point	Nr.	Substantiation
All kinds of unprocessed poultry meat	Presence of pathogenic microorganisms such as Salmonella and parasites	Microbiological	Incorrect slaughtering process	1	1	1	None, but minimal purchasing on specification	Yes	No	Yes	Yes			The meat will be heated at a later stage in which the vegetative pathogenic microorganisms will be killed.
All kinds of unprocessed poultry meat	Residues of veterinary drugs	Chemical	Misuse of veterinary medicines	1	0	0	None, but minimal purchasing on specification	No						No risk due to National plan
All kinds of unprocessed game	Presence of pathogenic microorganisms such as Salmonella and parasites	Microbiological	Incorrect slaughtering process	1	1	1	None, but minimal purchasing on specification	Yes	No	Yes	Yes			The meat will be heated at a later stage in which the vegetative pathogenic microorganisms will be killed.

HACCP study: raw materials and processes

Raw material	Hazard	Type of Hazard	Cause	Potential effect	Probability to occur	Risk = probability x potential effect	Control measure	Is control of this risk necessary?	Is this phase specifically intended to eliminate the potential hazard or	Would the contamination with the identified hazard be such that the	Will a subsequent production phase eliminate the identified	CCP: Critical control point	Nr.	Substantiation
General														
Receives perishable raw materials	Outgrowth of pathogenic microorganisms	Microbiological	Incorrect transport of raw materials	1	1	1	Measure the temperature	Yes	Yes			CCP	1	The meat will be heated at a later stage in which the vegetative pathogenic microorganisms will be killed.
Receipt of frozen products	Outgrowth of pathogenic microorganisms	Microbiological	Transport temperature too high	1	0	0	None	No				Legal condition (LCP)		Only when frozen products are delivered above 7 ° C can there be dangers for public health. There is, however, a legal requirement of -15 ° C.
Receipt of other raw materials	No specific danger													
Storage of frozen products	Outgrowth of pathogenic microorganisms	Microbiological	Transport temperature too high	1	0	0	Frozen temperature measurement	No				Legal condition (LCP)		Only when frozen products are delivered above 7 ° C can there be dangers for public health. There is, however, a

Introduction

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Our company

- Question 2: How does the HACCP study look like for our company?
- Question 3: How does the CCP and OPRP monitoring table look like?

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Introduction

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Legislation: EU regulations

- 1990-496 Nutritional information
- 2002-178 General Food Law
- 2005-2073 Microbiological criteria
- 2005-396 Pesticide residues
- 2006-1881 Contamination of food
- 2006-1924 Nutrition and health claims
- 2008-1333 Additives
- 2008-1334 Aromas
- 2011-1169 Food information

Legislation: Info Sheets & Knowledge Sheets

Info Sheets: how to deal with sampling

- Info sheet 64
- Info sheet 65
- Info sheet 85

Knowledge Sheets

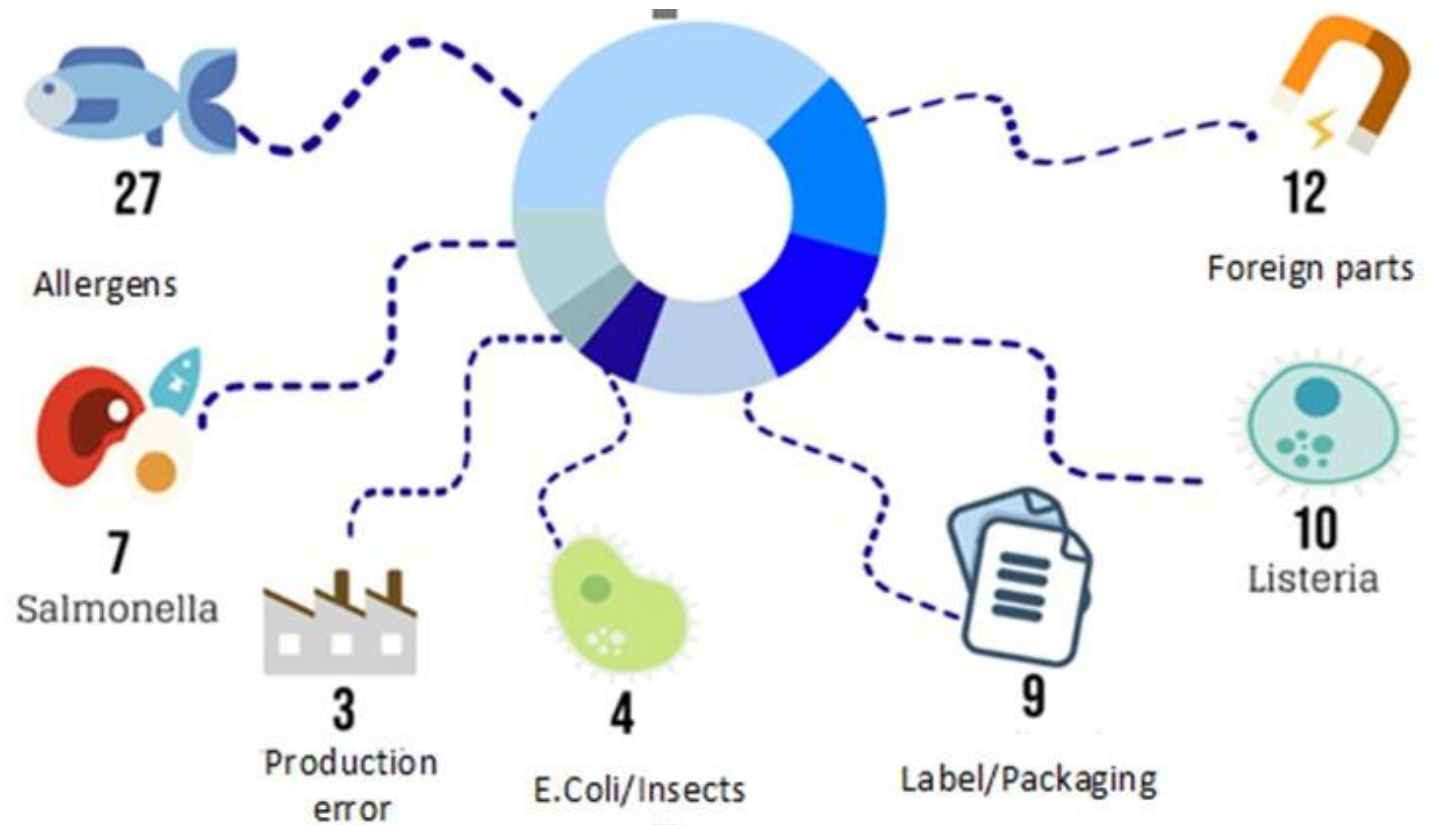
- Food allergy and food intolerance
- Bioterrorism, biological agents with guideline
- Contaminants from PVC packaging
- Contaminants from packaging by irradiation
- Paralytic shellfish poisoning (PSP)
- Toxoplasma gondii
- Zoonoses

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Legislation: Recall

- 2002-178 General Food Law
 - Article 19: By order of competent authority
 - BuRO risk assessment
 - Reporting guide
 - Issue management
-
- RASFF - Food and Feed Safety Alerts

Legislation: Recall (VMT overview 2019)





Our company

- Question 4: What does our Recall procedure look like?
 - Does this refer to the reporting guide?
 - Does it state when the certifier must be contacted?

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Food Safety Authority

- 1. Tracing
 - Properly recording the current method of tracing all normal products as well as any biological flow.
 - Describe any missing trace actions in more detail and record them in additional records.
 - Method of tracing closed weekly: demonstrably correct.
- 2. Additives
 - Raw materials, Recipes, End products up to date
 - 2 E-number analysis on this product portfolio
 - Keep E-number analysis up to date

Food Safety Authority

- 3. Microbiology
 - Check microbiological plan for legislation.
 - Check microbiological plan last year for compliance.
 - Carefully implement current year microbiological plan.
- 4. Listeria
 - Demonstrable compliance with info sheet 85 regarding Listeria.
 - Analysis of current product portfolio in which FSSP must be substantiated with, among others, why Challenge tests have or have not been carried out.
 - Describe the Listeria approach that demonstrably meets the legal requirements.

Food Safety Authority

- 5. STEC
 - 5A Using the product portfolio, analyze which raw products to be consumed can have STEC as a problem.
 - 5B Conform STEC to Food Safety Authority policy and guarantee these products regarding STEC
 - 5C Info sheet 64 of Food Safety Authority considered for STEC
- 6. EDP audit
 - 6A Administrations may be taken without any reason / suspicion

NVWA fines the company half a million euros for not cooperating with a recall of potentially contaminated pork.

NVWA fined a meat processing company of more than EUR 500,000. In 2018, despite the NVWA's urging, the company did not take sufficient measures to remove pork that may have been contaminated with *Salmonella* from the market. In addition, the meat processor has asked its customers to ignore instructions from the NVWA to withdraw products from the market.



iMIS Food Security Program Training

Part 2: Contents

- Food Safety Compliance
- FSSC22000
- What should you pay attention to?
- FSSC22000, version 5 HLS
- QESH standards
- HACCP team: tasks
- HACCP team: annual reports

Contents

- **Food Safety Compliance**
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QUALITY HOLISTICS



			Specifications	Quality Activity Monitoring	Traceability	Assessment
QUALITY STANDARDS			CERTIFICATION MANAGEMENT			
EFQM INK ISO9001:2000 ISO17025	SQF Eurepgap GMP Animal Feed AIB	HACCP BRC IFS EFSIS	real time standard requirements	Operational Framework	Test	Risk Quality Standard evidence based practice
ACCREDITATIONAL BODIES		CERTIFICATIONAL BODIES				
CUSTOMERS		CONSUMERS		DEMAND RELATIONSHIP MANAGEMENT (SRM)		
Retail Organisations Food Service Wholesalers and Trade Food Manufacturers Out of Home Outlets Hospitals	Habits, Attitudes Preferences Allergens Quality Needs Information Needs	product, process requirements	Information Centre Demand Quality Information Centre (DQIC)	Products Specifications	Customer Satisfaction Consumer Needs	
FOOD AND DRINK FACTORY			BUSINESS PERFORMANCE MANAGEMENT (BPM)			
FOOD & DRINK MANAGEMENT			process, product and people requirements	Training, Support, Procedures, Quality Documents, Quality Database	Ingredients, Semi-products	Business System
LABORATORIES	PRODUCT SUPPLIERS	SERVICE SUPPLIERS	SUPPLY RELATIONSHIP MANAGEMENT (SRM)			
Microbiological Analytical	Raw materials Equipment Packaging Machines	Cleaning and Hygiene Pest Control Measurements Cooling Systems	process, product and people requirements	Supply Quality Information Centre (SQIC)	Raw materials Specifications	Suppliers
GOVERNMENT CONTROL BODIES			LEGISLATION MANAGEMENT			
Global International National Where appropriate	General Food Law Codex Alimentarius		legal requirements	legal requirements: - people - products - process - building	Informed	Risks Legal evidence based practice
LEGISLATIONS						



PLAN

Risk Assessment
Legal Compliance
Blue Print
Operational Framework
Yearly Plan

DO

Document Generator
Audit-system
SpecCheck
Training
Supportive Material
Track and Trace

CHECK AND ACT

Quality Data Warehouse
Quality Cockpit
Standard Reports

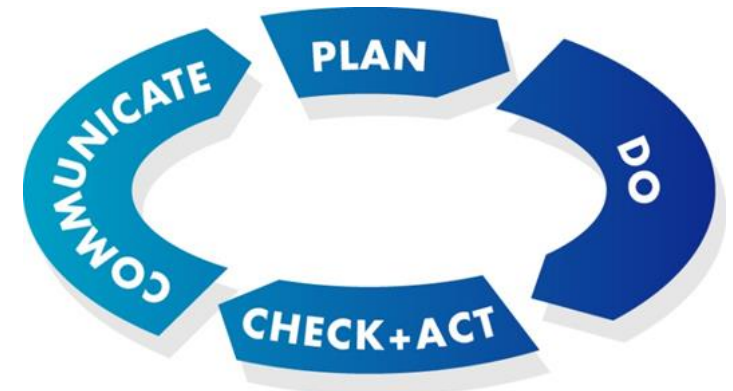
COMMUNICATE

Newsletter
www.iMISQA.com
SpecReport
Quality Information Centre
Supplier Portal



iMIS Food content & software

- iMIS: integral Management & Information System
- Food: for real-time management of food safety
- Content
 - Operational framework for food safety
 - Food Safety standards: HACCP, FSSC22000, BRC, IFS
 - Extra for QESH: ISO9001, 14001, 26000
- Software
 - User-friendly



Food Management:

- Dynamic playing field
 - 2000 quality requirements
 - 100 suppliers
 - 100 customers
 - 100 employees
 - 400 legislative changes



Standards

- Quality:
 - BRC
 - IFS
 - FSSC22000
 - SQF
 - Dutch HACCP
 - Quality marks such as HALAL, SKAL, UTZ
- Environment: ISO14001
- Occupational health and safety: ISO45001
- Corporate Social Responsibility:
 - CSR Performance Ladder (ISO26000)



Standards

- Food Production parameters
 - Product
 - Process
 - Person
 - Production area

- Food Defense
- Food Fraud
- Not just for production: traders too
 - HACCP of the entire chain

- Retail customer? 2 CI's and 2 Certificates!
- ZZP auditors...
- SKAL <-> Food Safety Authority <-> EDP audit



Standards in practice

- Most food companies are BRC, IFS, or FSSC22000 certified
- What are the differences and similarities between these standards?
- How do you set up your quality system, documentation, and compliance?
- How do you deal with difficult audit situations?
- As a company, can you cancel the audit yourself if you want to?
- Based on more than 500 audits, knowledge is transferred about how you can best demonstrably meet the quality standards
- How are the certification bodies organized?
- Expand the food safety system to ISO9001, ISO14001 and the CSR performance ladder

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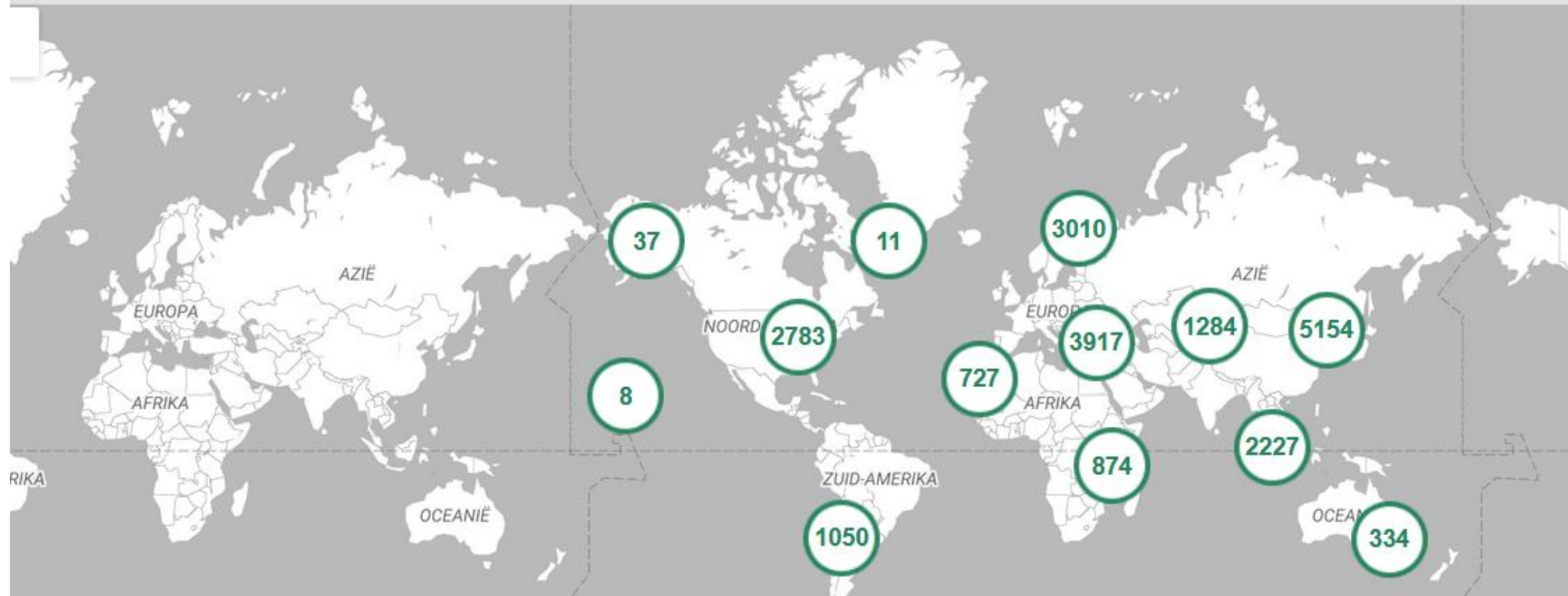
FSSC22000

- FSSC 22000 stands for Food Safety System Certification 22000 and is an internationally recognized form of demonstrable food safety.
- The FSSC 22000 has its origins in the Codex Alimentarius and is a standard developed by the Foundation for Food Safety Certification
- The FSSC 22000 standard is becoming increasingly popular within the food industry, because it has been approved by the GFSI (Global Food Safety Initiative).



FSSC

Found **23768** Certified Organizations



What is FSSC 22000 based on?

- ISO 22000:2018
- Sector specific Pre-Requisite Program (PRP) ISO/TS 22002
- Specific FSSC 22000 requirements
- The FSSC 22000 standard is a food safety management system that focuses on the PDCA approach
- Both at the organizational level and at the operational level
- Focus on risk-based thinking and in the field of HACCP

ISO22000: standard requirements

- 4 Context of the organization
- 5 Leadership
- 6 Planning
- 7 Support
- 8 Operation
- 9 Performance evaluation
- 10 Improvement

ISO/TS 22002 15 standard requirements

- 4 Construction and layout of buildings
- 5 Layout of premises and workspace
- 6 Utilities – air, water, energy
- 7 Waste disposal
- 8 Equipment suitability, cleaning and maintenance
- 9 Management of purchased materials
- 10 Measures for prevention of cross contamination

ISO/TS 22002 15 standard requirements

- 11 Cleaning and sanitizing
- 12 Pest control
- 13 Personnel hygiene and employee facilities
- 14 Rework
- 15 Product recall procedures
- 16 Warehousing
- 17 Product information/consumer awareness
- 18 Food defense, biovigilance and bioterrorism

•FSSC 22000 does not work with scores on the certificate. There is, however, a three-year cycle in which one unannounced audit is compulsory in those three years.

FSSC22000 audits

- Do not forget the appendix: extra standard requirements (nice surprise during an audit if these are not explained in the cross table)
- FSSC 22000 does not work with scores on the certificate. There is, however, a three-year cycle in which one unannounced audit is compulsory in those three years.
- Use PAS 96 for Food Defense

Other standards relative to FSSC 22000

- The big difference between FSSC 22000 and, for example, the BRC and IFS, is that there is no checklist stating exactly what is and what is not accepted (as is the case with BRC/IFS)
- The FSSC 22000 standards leaves more room for interpretation and personal insight. This is both an advantage and disadvantage.
- Certain risks can be excluded by means of well-founded arguments in the HACCP-analysis. In this way, a practical and workable system can be created for every company.

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Contents

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What should you pay attention to?

- Do not forget Appendix FSSC, including services
- Knock Outs at IFS
- Fundamentals at BRC
- Management board expectation:
 - 80% of audit results dependent on the auditor
 - Focus with QA on a working system AND do not use the standard as an improvement tool.
 - BRC and IFS are often a settlement instrument, make sure that everything is correct on the days of the audit and that open action points that are standard related are also resolved.
 - Enough QA managers and advisors can wrongly do something else after an undesired score.

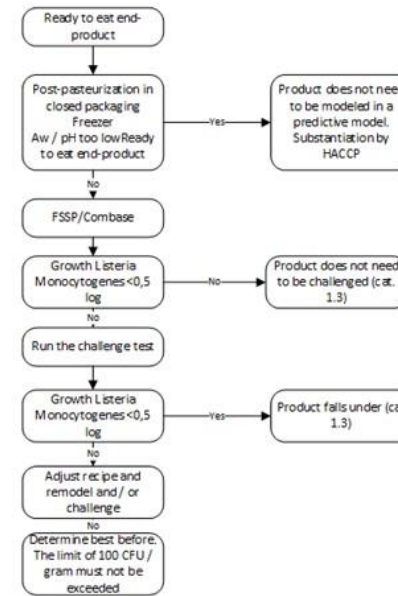
What should you at least arrange properly?

- Food Production parameters
 - Product: product assurance & development
 - Process : Cleaning and disinfection
 - Person: screening for diseases and hygienic working
 - Production area
- Food Defense
- Food Fraud
- Evidence Based practice:
Evidence: everything done for food safety
- Make sure all data is stored in the company! Code microbiology so that you don't fall victim to external errors.
- Plant Based chilled // ready to heat



What should you at least arrange properly?

- Make sure everyone knows the location of:
 - HACCP study
 - Management reports
 - Listeria and additives overview
- Train relevant colleagues in
 - The management system
 - HACCP
 - Internal auditing
 - Location information sources
 - Traceability
 - ERP system and Backups
- Use a separate system for consumer & chain information



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FSSC22000 version 5:
general

The FSSC 22000 Scheme has 3 required components

ISO 22000

- ISO 22000 a provides common framework across the entire supply chain to manage requirements, communication internally & externally, and continually improve the system

PRPs

- Sector specific Pre-Requisite Programs (ISO/TS standards/BSI PAS)

FSSC 22000 requirements

- FSSC 22000 adds specific requirements to ensure consistency, integrity, and to provide governance and management of the Scheme

FSSC22000 version 5: general

ISO 22000:2018 The difference between OPRPs and CCPs

<p>8.5.4.2. Critical limits and action criteria Action criteria for OPRPs are measurable or observable. Compliance with action criteria helps to ensure that the acceptable level is not exceeded.</p>	<p>8.5.4.2. Critical limits and action criteria. Critical limit values for CCPs are measurable. Compliance with critical limit values ensures that the acceptable level is not exceeded.</p>
<p>8.5.4.3. Monitoring system for OPRPs: method and frequency must be appropriate to the probability of failure and the severity of the consequences.</p>	<p>8.5.4.3. Monitoring systems at CCPs: method and frequency are able to detect any failure in time, so that the product can be blocked.</p>
<p>8.9.2.3. Action criteria not met: a) identify the consequences of the deviation; b) determine the causes of the deviation; c) Identify products to be treated according to 8.9.4.</p>	<p>8.9.2.2 Critical limits not met: identify affected products as potentially unsafe and handle them according to 8.9.4.</p>

FSSC22000 version 5: general

- iMIS Food: procedures for Food Defense and Food Fraud
- TACCP and VACCP reports based on FSSC guidelines



10 clause structure - Main clauses of High Level Structure (HLS)

- FSSC22000 version 5: ISO22000 changes

01 Scope

02 Normative references

03 Terms and definitions

04 Context of the
organization

05 Leadership

06 Planning

07 Support

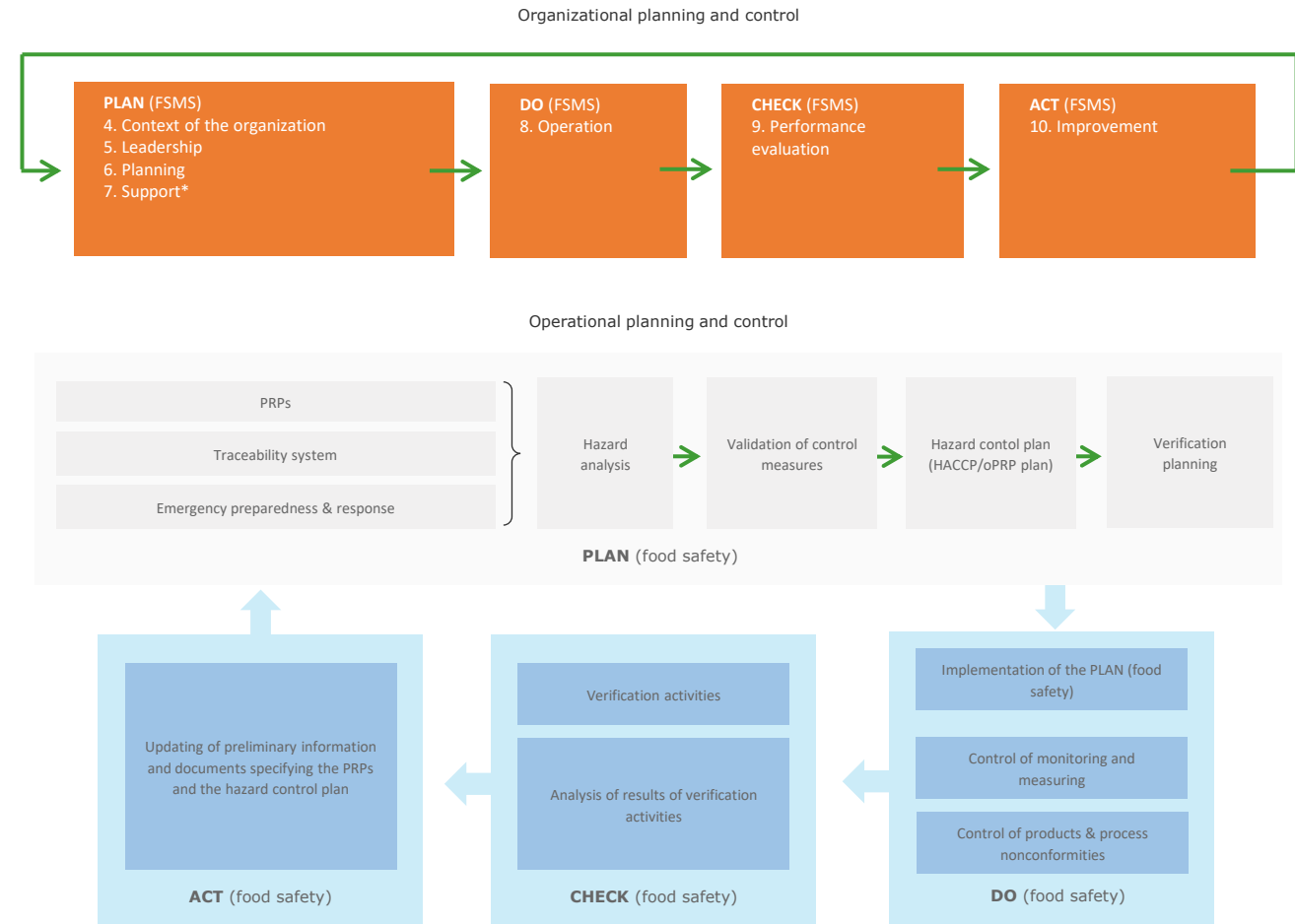
08 Operation

09 Performance evaluation

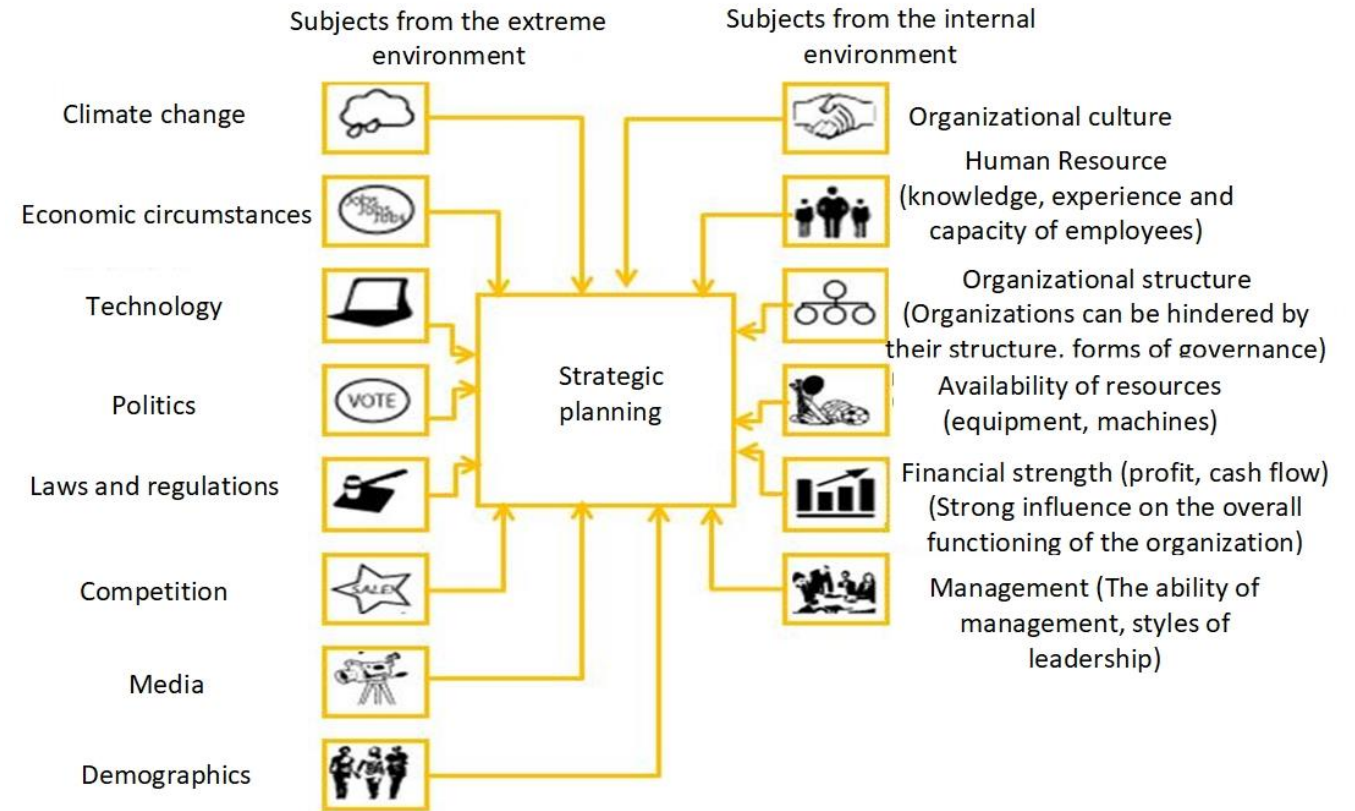
10 Improvement

FSSC22000 version 5: ISO22000 changes

- Risk on 2 levels
- Strategic
- Company risks
- Management is leading
- Operational
- HACCP
- QA is leading



FSSC22000 version 5: Context analysis and SWOT



FSSC22000 version 5: Context analysis and SWOT

	A	B	C	D	E
1	Stakeholder analysis				
2	version 1.0				
3	date:				
4	carried out by:				
5	Stakeholder / layout	Degree of influence	Degree of importance	Score	
6	Customers	Very high	Very high	24	
7	Consumers	Very high	Very high	24	
8	Providers of services; employment agency, pest control, transport, company clothing, maintenance. cleaning company	Very high	High	18	
9	Suppliers of goods; raw materials, materials, resources, equipment, building and facilities	Very high	High	18	
10	Cooperation partners	High	High	12	
11	Legislators and Competent Authority; NVWA, Environment Agency, Inspectorate SZW, Dutch Data Protection Authority	Very high	Very high	24	
12	Certifying body	High	High	12	
13	Gatekeeper / waste disposal flows	Moderate	Moderate	4	
14	Competition	High	High	12	
15	Trade associations	Moderate	Moderate	4	

FSSC22000 version 5: Context analysis and SWOT

- Step 1 Determining stakeholder: all stakeholders with a score of 8 or higher are considered relevant
- **Step 2 Determining expectation from a stakeholder's point of view**

Relevant stakeholders	Specific expectations	Associated Risks	Required action general (current control measures)
Customers	Project Quality and food safety, availability, price / margin, support / service, delivery reliability, certification, product development, brand support, image	Increasing power and requirements, price pressure, no / less purchase, non-compliance with payment obligations or agreements.	Customer satisfaction survey, annual interviews, customer visits (retail, catering wholesaler and retailers, food service). Market research, complaint analysis
Consumers	Ease of use, product quality, taste, price, no negative impact on health, shelf life, food safe.	Complaints, product does not meet expectations or there is no need for this product (demand too low)	Market research, complaint analysis, social media / internet discussions
Providers of services; employment agency, pest control, transport, company clothing, maintenance, cleaning company	Compliance with agreements / agreements made, timely payment, continuity	Company does not meet the requirements, does not comply with agreements, does not comply with legislation / permits. Errors can lead to unsafe situations. Food defense. not deliver or insufficient.	Verification
Suppliers of goods; raw materials, materials, resources, equipment, building and facilities	Fulfillment of agreements / contracts, payment, continuity	Delivery not according to conditions and specifications, insufficient availability, not good price / quality. Fraud, food defense, recalls, image, failure to comply with delivery agreements (delivery reliability), price fluctuations, increasing power due to growth.	Verification
Cooperation partners	Meeting contracts, financial obligations, continuity, mutual benefits	Failure to adhere to agreements or delivery obligations. Product or service does not meet specification. Recalls, image damage. Fraud, food defense. Lost certification.	Verification

FSSC22000 version 5: Context analysis and SWOT

- Step 1 Determining stakeholder: all stakeholders with a score of 8 or higher are considered relevant
- Step 2 Determining expectation from a stakeholder's point of view
- **Step 3 Risk analysis: internal and external issues**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	External Issues														
2	C ultural, social, political, legal, financial, technological, economic and natural surroundings including the environment in which the organization operates														
3	Who the competitors are and any contractors, subcontractors, suppliers, partners and providers														
4	National and international law														
5	Industry drivers and trends which have influence on the organization														
6	The organization products and services and their influence on food safety														
7	Availability and variety of external providers of services/ products														
8	Changes in consumption patterns														
9	Capacity of changes regarding premises (landlord)														
10															
11															
12	Internal Issues														
13	Governance, organizational structure, roles and accountabilities														
14	Policies, objectives and the strategies in place to achieve them														
15	Competence of personnel														
16	Food Safety culture within the organization and the relationship with workers														
17	Process for the introduction of new products, materials, services, tools, software, premises and equipment														
18	Working conditions														
19	Resources (under-utilisation of resources)														
20	Retention of skilled employees														
21	Number and variety of clients/ customers														
22	Linkage to a certain activity, location and/or period														
23															
24															
25	SWOT														
26	PESTE														
27															

FSSC22000 version 5: Context analysis and SWOT

Strengths:

Knowledge of the market, experience
Brand awareness products
Relationships in food service, catering entrepreneurs
Loyal and (in-house) trained staff
Part of group (sharing knowledge, economies of scale, sharing functions)
Assortment meets the needs of different moments and consumers

Weaknesses:

Scale in relation to customers (catering wholesalers, retail)
Products can be copied at a lower price
Brand awareness among consumers
Brand awareness among young people
Not constant quality of raw materials for etc etc.
Product quality not constant, baking problem, etc.

Opportunities:

More spending space for consumers, good financial conditions in the Benelux (economic growth)
The culture of drinks or food etc / going out has grown in NL
A healthier image of meat in the (sports) canteen compared to snacks and fries
Export markets
Seen in demand for healthy products or products with a healthy image.
Responding to the needs of consumers of immigrant origin (halal ..)
Products suitable for airfryer or oven

SWOT analysis
Customer name trial

Threats:

Cheaper alternatives, me-too products, also under PL
A lot of competition, also indirectly from other products that meet the same need (moment of use, drinks, snacking)
Strong negotiating position from customers and suppliers.



Our company

- How is our context analysis, stakeholder analysis and SWOT?
 - Same for the TACCP and VACCP study
 - How is our procedure for Food Defense and Food Fraud?

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








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- Food Safety Compliance
- FSSC22000
- What should you pay attention to?
- FSSC22000, version 5 HLS
- **QESH standards**
- HACCP team: tasks
- HACCP team: annual reports

ISO9001

-  ISO09001_Management review.docx
-  ISO09001_Procedure Intern auditen.docx
-  ISO09001_Procedure Management review.docx
-  ISO09001_SWOT analyse.docx
-  ISO9001_Auditrapport.doc
-  ISO9001_Beleidsverklaring.doc
-  ISO9001_Jaarplanning.xls
-  ISO9001_Klachten, verbeternotitie.doc
-  ISO9001_Leveranciersbeoordeling.xls
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-  ISO9001_Procedure contextanalyse.docx
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-  ISO9001_Risico's en kansanalyse.xls
-  ISO9001_Stakeholderanalyse.xls
-  ISO9001_stakholders&risico analyse gecombineerd (ook MVO).xls

ISO14001

-  ISO014001_Procedure Intern auditen.docx
-  ISO014001_Procedure Management review.docx
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-  ISO14001_Leveranciersbeoordeling.xls
-  ISO14001_Management review.docx
-  ISO14001_milieuaspecten inventarisatie met risico's en kansen.xls
-  ISO14001_opleidings en competentieoverzicht.xls.xlsx
-  ISO14001_Procedure contextanalyse.docx
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HACCP team: tasks (1/2)

- The HACCP team has the following responsibilities:
 - Conduct a hazard analysis to determine which hazards need to be controlled, which degree of control is required to achieve food safety and what combination of control measures is required.
 - Plan and implement processes necessary for the validation of control measures and/or combinations of control measures, and to improve the food safety management system verification and improvement.
 - Assess changes in the production process that have a negative effect on the food safety.
 - Verification of the food safety system.
 - Indicate per process step, including all products, all processes and all elements of the PRP on which these have been assessed and justify whether it is a Critical Control Point (CCP or OPRP).
 - Check whether the food safety system falls within the scope and whether the scope covers the entire food safety system.
 - Make adjustments to keep the food safety system up to date and correct either by verification or validation.

HACCP team: tasks (2/2)

- Management of training courses for staff to ensure that everyone has sufficient knowledge related to the necessary food safety.
- Determining and verifying the scope.
- In case of changes in raw materials, packaging materials, processing methods, infrastructure and/or equipment, the HACCP plan is revised to ensure that the product safety requirements are met.
- In the hazard analysis, attention is also paid to the position in the chain and will be taken into account with our suppliers and customers.
- It is essential that the HACCP team has sufficient expertise. The expertise and composition of the HACCP team is recorded in the HACCP team TBV overview. Due to the current composition of the HACCP team, all necessary knowledge and expertise is available for the daily course of events. For additional specific information, QAssurance B.V. is used.
- The HACCP team has the approval of the management and is supported where possible with
- the necessary resources, facilities and time.

HACCP meetings

- An HACCP team consultation takes place according to a fixed frequency in which it is at least assessed whether:
 - The food safety system is up-to-date and effective.
 - The measures taken have been adequately implemented/taken.
 - New processes and/or products must be or have been assessed.
 - Developments with regard to legislation, technology, knowledge, etc. that have an impact on us.
 - Incidents or new information regarding food fraud or food defense that affect us.
 - Furthermore, any calamities and standard violations are reviewed and possible improvements identified. The realization of formulated objectives are assessed and the identified cause is investigated in the event of non-achievement of targets. Then the measures are defined.
 - The meetings are reported.

HACCP team: input (including from directive)

- New products;
- New raw materials;
- New excipients;
- Recipe adjustments;
- New or changed processes, investments;
- New location of equipment or environment;
- New suppliers of product or service, new services;
- New customer requirements that need to be translated to the shop floor;
- Changes in cleaning and disinfection (method, means, frequency, etc.);
- Possible legal changes or changes in standards;
- Changes in packaging and/or packaging material;
- Changes in storage or transport;
- Changes in the organisation, competences, responsibilities and authorities;
- Complaints and alerts;
- State of the art, new knowledge, research results;
- New knowledge about food safety hazards and control measures;
- Quality Level changes
- Objectives.

Our company

- Who is in the HACCP team why; and who is the HACCP team leader?
- What are the latest HACCP procedures?
- What were the latest changes in the company that have an impact on the study?
- When was the last time validated?
- What about the central action list and what is the next annual plan?

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