Food Manufacture

Internal Auditing

Lesson 2

Become competent in internal auditing in a food manufacturing environment.

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Important audits which affect the safety of the product and employee must be performed regularly, these are usually daily or every shift.

Regular audits include:

- Critical control points (CCP)
- Paperwork completion for traceability purposes
- Hygiene and fabrication
- Glass and brittle plastic
- Calibration
- Pest control
- Quality
- Good manufacturing practices (GMP)
- Taste panels
- Allergen Segregation
- Safety start up

Some regular audits may only need to be performed weekly depending on the product, item or area being checked.

HACCP audit

A HACCP audit involves monitoring CCP's. A CCP is a critical control point which is a specific point in the factory where food safety is at risk of being compromised so the product must be monitored correctly.

The checks which are carried out at a CCP e.g. fryer product core temperature checks, must be performed by an operative who is trained to do so.

HACCP audit

CCP checks may include:

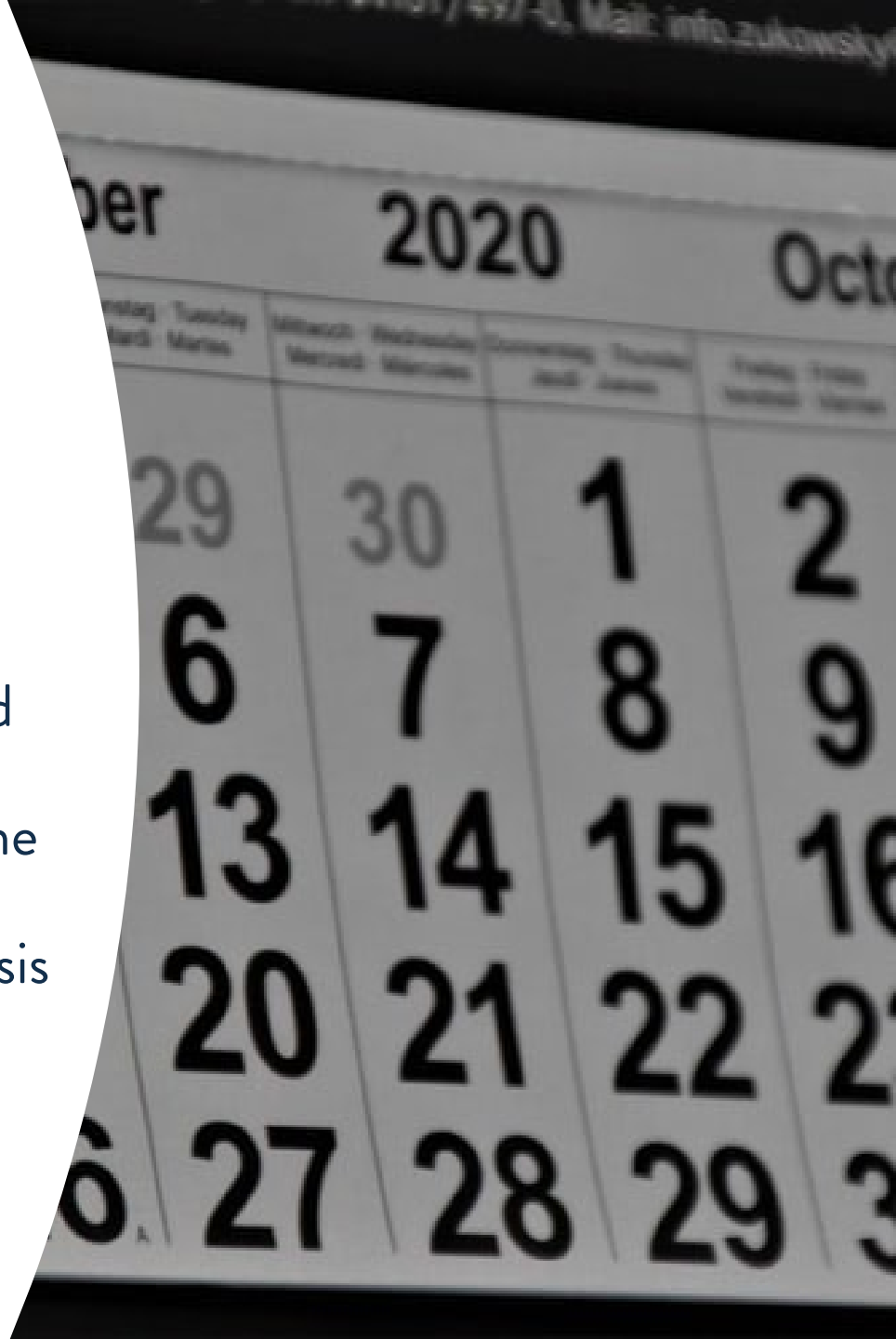
- Product core temperature checks
- Storage temperatures
- Date codes
- Allergen control

HACCP audit

All CCP checks will be recorded on documentation or computer systems for due diligence purposes.

HACCP audit

An audit of a CCP will involve checks being carried out correctly, verifying checks and monitoring the completion of documentation. An audit of the whole HACCP system should be performed on an annual basis unless required sooner.



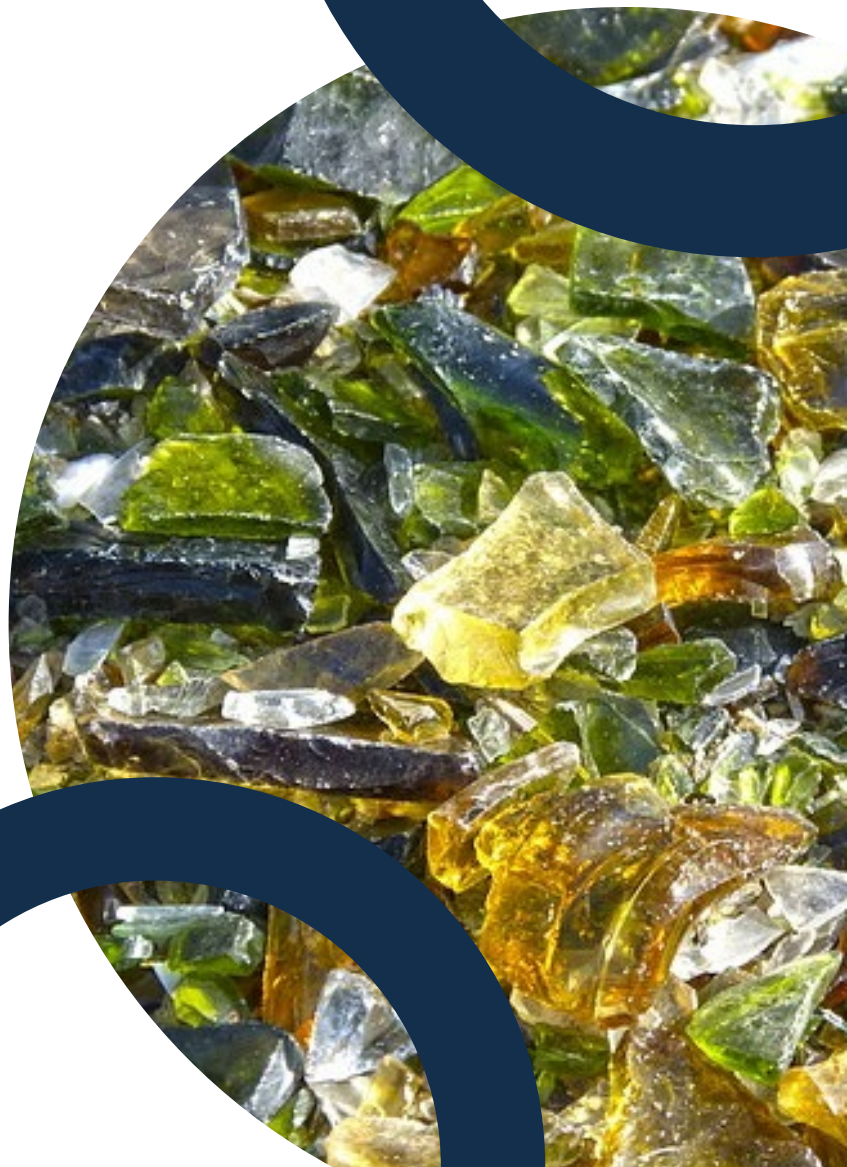
Good manufacturing practice audit

A GMP audit is carried out daily and a more intensive audit is carried out less frequently e.g. weekly/monthly to ensure general practices and procedures are being followed correctly.

A GMP audit may include:

- Checking PPE usage and condition
- Storage conditions e.g. stock rotation
- Foreign body risks
- Processes and procedures are followed
- Equipment and utensils e.g. knife control
- Toolbox checks
- Welding and mastic audits
- General documentation checks
- Product segregation e.g. meat and vegetable segregation
- Labelling
- General hygiene practices

Glass and brittle plastic audit



A glass and brittle plastic audit can be performed daily, weekly and monthly depending on the items being checked.

Glass and brittle plastic audit

It involves inspecting the glass and brittle plastics in the factory for damage or missing pieces. Where possible glass and brittle plastic should not be located in the factory.

Glass and brittle plastic audit

Items which are at more risk of becoming damaged or are located in a particularly unsafe area should be monitored more frequently e.g. daily

Glass and brittle plastic audit

All glass and brittle plastics should be recorded in a system which states its exact location in the factory. A map and number reference system is often used for this.

Glass and brittle plastic audit

If during an audit broken or missing glass or brittle plastic is found, then this should be reported to management immediately because it is a food safety risk.

Quality audit

Quality checks should be performed daily in all factory departments. They monitor the quality of the ingredients and products.

Quality audit

Quality checks are performed using a product/ingredient standard sometimes called a specification.

Quality audit

The product /ingredient specification will set parameters for what is acceptable and not acceptable. A red, amber, green system is sometimes used.

Some quality checks are:

- Goods in ingredient specification checks
- Product, ingredient and pack weights
- Viscosity
- Product quantities and sizes
- Seal checks
- Product and ingredient colours
- Oil quality e.g. free fatty acid analysis
- Mix distribution
- Formation techniques e.g. correct folding and shape

Calibration audit

All equipment and machinery is checked regularly to ensure it is working correctly.

Calibration audit

Scales and temperature probes in a busy factory should be checked daily. They should also be sent to a calibration specialist once a year to ensure they are working effectively.

Calibration audit

Safety start up checks should be performed on all equipment and machinery before it is used. This is a health and safety requirement.

Calibration audit

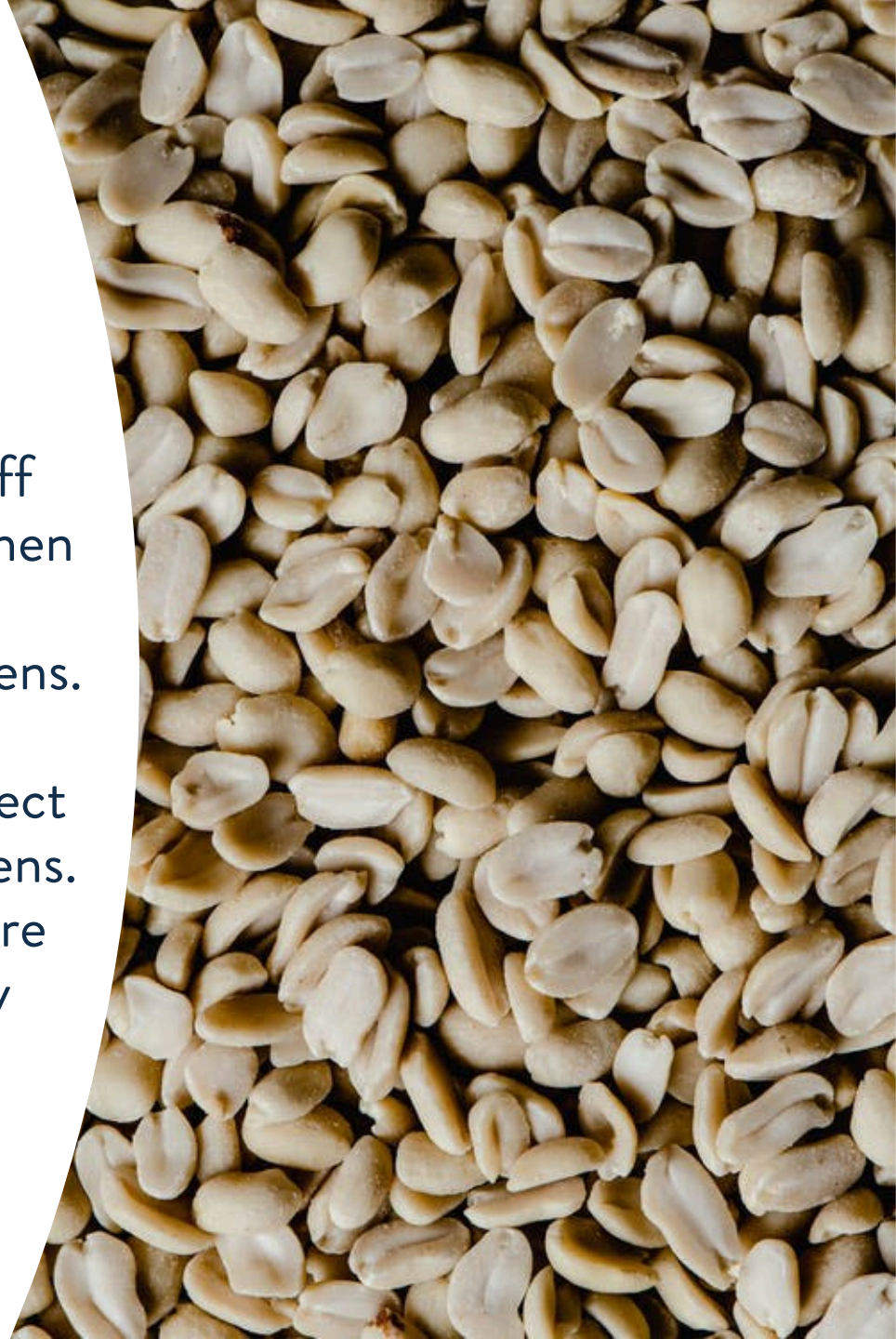
Risk assessments should be performed and regularly reviewed on all equipment, machinery and job roles.

Allergen audit

Some high risk environments have regular allergen audits. This is where the use and storage of allergens is checked and monitored.

Allergen audit

Allergen audits will look at staff and the correct use of PPE when handling allergens, cleaning practices after handling allergens. The storage conditions and location of allergens. The correct packing and labelling of allergens. The main focus will be to ensure allergens are labelled correctly and segregated from non-allergenic food and drink.



Taste panel audit

These are usually performed daily depending on the production capacity of the factory.

Taste panel audit

There are three main taste panel audits. The first is a regular schedule taste panel of products which have been manufactured and are ready to be distributed. This can form part of a positive release system.

Taste panel audit

The second type of taste panel is to review the businesses products against competitors similar products. All products should be purchased from a shop to monitor the products the same as a customer would.

Taste panel audit

The third type of taste panel is to audit the product from the same product batch at different points of its shelf life e.g. beginning, middle and end. Microbial testing should also be monitored when analysing shelf life.

Taste panel audit

Taste panel audits involve checking the products packaging, cooking and preparing the product, checking its appearance and attributes against a specification. Then finally performing an organoleptic analysis (tasting) of the product.

Taste panel audit

Taste panels usually follow a red, amber, green system whereby any products rated red will be quarantined until an investigation and further testing is carried out. Management will then make a decision on what will happen to the product.

Laboratory product audit

Microbial testing of products is carried out following a schedule. The schedule ensures all ingredients and products are monitored for microbial growth. This can be used as part of products being distributed.

Laboratory product audit

Nutritional content of products are also monitored following a schedule. This ensures the product is being made correctly.

Pest control audit

These audits are mainly performed monthly by outside contractors who specialise in and supply pest control devices.

Pest control audit

All suspicious activity is reported and acted on to prevent an infestation occurring.

Traceability audit

Documentation is usually checked daily in a busy factory and a traceability audit should be performed once a week on that documentation.

Traceability audit

A traceability audit involves using the documentation trail throughout the factory to trace the product, its storage, how it was processed, prepared, the ingredients and suppliers used.

Traceability audit

This is where CCP documentation is essential in monitoring food safety.

Traceability audit

A traceability exercise should be able to be performed from start (ingredients) to finish (finished product) of the product and also from the finished product and back to ingredients.

Traceability audit

A traceability exercise maybe used if there has been a problem with a product so it is important that traceability audits are performed regularly to prevent any problems occurring.

Hygiene and fabrication audit

These audits should be performed regularly. A visual inspection can be used to monitor hygiene and the building maintenance.

Hygiene and fabrication audit

Adenosine tri-phosphate (ATP) test swabs can be used to instantly see if cleaning has been effective. A surface is swabbed and a meter is used to detect if microbial ATP is present.

Hygiene and fabrication audit

Some factories use ATP tests to monitor after deep cleaning to check it is cleaned properly.

Hygiene and fabrication audit

Chemical concentrations are checked to make sure the correct type and amount of chemicals are used.

Hygiene and fabrication audit

Drains are also monitored regularly ensuring no dangerous microbial growth occurs or pest control risks occur.

Hygiene and fabrication audit

Scheduled microbial swabbing should be performed on surfaces especially food contact surfaces to monitor microbial growth. The quality of water in a factory is also monitored for microbial growth.

All systems and processes are audited at least once a year to ensure they are fit for purpose and working effectively. External suppliers should also be audited annually.

All policies, procedures and training systems should be audited annually and a record of any changes should be recorded for reference if needed. Documentation should have a reference, issue number, issue date and approved by statement. This is to ensure the correct documentation is being used.

Revision Activity 2

Name three audits carried out in a factory?