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FOOD HYGIENE: FOOD SAFETY REQUIREMENTS AT CATERING ESTABLISHMENTS

Food hygiene means the measures and conditions necessary to control hazards and to ensure fitness for human consumption of a foodstuff taking into account its intended use.

Food business

- Any establishment carrying out any stage of production, processing and distribution of food
- **Primary responsibility for food safety rests with the food business operator.**
- Food business operator is obliged to ensure that all stages of production, processing and distribution of food under their control satisfy the relevant hygiene requirements laid down in legal documents.

Food safety requirements

- Based on EU and Czech **legal documents** AND the requirements of **good manufacturing practice (GMP)** = procedures to ensure general quality of the product.
- **GMP** includes **good hygiene practice (GHP)** = procedures to ensure food safety.
 - **HACCP - Hazard Analysis Critical Control Point** system is a part of the GMP & GHP.



HACCP system principles

- Identifying
 - any **hazards** that must be prevented, eliminated or reduced to acceptable levels;
 - **critical control points** at the step(s) at which control is essential
- Establishing
 - **critical limits** at critical control points;
 - and implementing effective **monitoring procedures** at critical control points;
 - **corrective actions**
- Documenting the activities

Example HACCP: roast meet (1)

STEP	HAZARD AND CAUSE What could go wrong?	CONTROL What can be done to prevent or reduce the hazard?	MONITORING PROCEDURE What can be checked?	CORRECTIVE ACTION What if things are not correct?
Raw meat supply	Bacterial contamination	Good suppliers. Store and deliver at <5°C = Good Practice (<8°C Legal Requirement) Properly date marked.	Check supplier if possible. Check all deliveries for temperature, date mark and condition.	Avoid bad suppliers. Reject bad deliveries.
Storage	Growth of bacteria. Contamination from store.	Store below <5 °C (Good Practice) <8 °C (Legal Requirement) Clean fridges.	Check and record fridge temperatures. Visual check against cleaning schedules.	Adjust or repair. Re-clean storage area.

Example HACCP: roast meet (2)

STEP	HAZARD AND CAUSE What could go wrong?	CONTROL What can be done to prevent or reduce the hazard?	MONITORING PROCEDURE What can be checked?	CORRECTIVE ACTION What if things are not correct?
Preparation for cooking	<p>Growth of bacteria if too long at room temperature.</p> <p>Contamination from people, equipment etc.</p>	<p>Prepare quickly in cool area.</p> <p>Good cleaning and sanitising.</p> <p>Staff hygiene.</p>	<p>Visual checks.</p> <p>Visual checks against cleaning schedules.</p> <p>Visual checks.</p>	<p>Move food to fridges.</p> <p>Clean immediately.</p> <p>Wash hands & clean clothing.</p>
Cooking	Survival of bacteria.	Cook to temperature in centre above 75 °C.	Check temperature.	Put back in cooker until 75°C achieved.
Hot holding	Growth of bacteria.	Keep at 65 °C or hotter.	Check food temperature in holding box or on serving deck.	Adjust or repair.

Requirements: **Food premises** such as a restaurant - **Separate areas**

Storage

- Large enough for the separate storage of:
 - raw materials
 - processed materials
 - separate refrigerated storage

Processing

- Preparation room,
- Hot kitchen
- Cold kitchen
- Room for kitchenware washing

Dining

- Separate:
 - Food dispensing
 - Reception of used tableware

Requirements: **Food premises** (such as a restaurant)

- Construction requirements, among them:
 - Sufficient number of flush lavatories & washbasins
 - Separate entrances for staff & customers, for delivery of materials & garbage disposal
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- Adequate natural or mechanical ventilation
- Running drinking water, waste water disposal (sewage system), garbage disposal

Requirements: Food business operation & foodstuff (1)

- **All materials** used in processing products of **good quality & safe**.
- Raw materials/ingredients stored **kept in appropriate conditions** designed to prevent harmful deterioration and protect them from contamination.
- Raw materials/ingredients/products likely to support the reproduction of pathogenic micro-organisms or the formation of toxins are **NOT kept at temperatures that might result in a risk to health**. The **cold chain** is not interrupted.
- **Food protected** against any contamination.

No cross-contamination!

– Separate room/space, working surface, and utensils for each type of operation.

- No contact between „dirty“and „clean“
- No crossing of „dirty“and „clean“ operations - one way process of all operations.
- „Dirty“- raw foodstuff processing, kitchenware washing, garbage disposal.
- „Clean“ – cooking, final meal preparation.



Requirements: Food business operation & foodstuff (2)

- **Serving** freshly prepared meals **as soon as possible after cooking**
- Foodstuffs to be held or served at chilled temperatures: **cool as quickly as possible** following preparation to a temperature which does not result in a risk to health.
- Catering for **specific groups** (e.g. children in kindergartens, schoolchildren, students, staff, patients, troops):
 - nutritional value and meal composition must **comply with the daily recommended allowances**, dietary requirements or specific needs
 - No raw eggs, meat and fish
- **Sanitation** : cleaning, pest control (insects, rodents)
 - Routine disinfection, disinsection & deratisation (DDD)
 - Daily routine cleaning of all spaces, machines & utensils

Every **person** working in a food-handling area is obliged to:

- Maintain **personal cleanliness**,
- Wear **suitable, clean** and, if necessary, protective **clothing**.
- Undergo a **medical examination** before beginning to work in the food business
- Have a valid health **certificate**
- **Report** immediately his/his family members (suspected) infectious diseases to the food business operator
- **Inform** his physician about his employment in food business
- Learn about **food safety** (Food business operator ensures training)

Persons NOT permitted to handle food or enter any food-handling area in any capacity

- Suffering from/carriers of a **disease** likely to be transmitted through food
- Afflicted e.g. with infected **wounds, skin infections, sores ...**

Food catering in health services

- Dietary **system designed by the hospital**
- (Usually) Hired caterer ensures catering services – **same obligations as in other food business**
- Meals **prepared in a central kitchen**, transported to wards and distributed immediately
 - Suitable means of transport only for food; regular cleaning & disinfection
 - Meal temperature must not drop below 65 °C during the transport and distribution.

Meals distribution in health facilities:

Type 1

- Transport from the central kitchen to wards in large thermo-containers
- Individual servings put on plates in the ward's "tea kitchen"; warmed up if needed
- Tableware washed & wastes disposed of as communal wastes at the ward
 - Infectious diseases ward: disinfection of tableware & transport containers; leftovers disinfected

Meals distribution in health facilities:

Type 2 – tablet system

- Meal servings put on individual patients' plates on a tray under a cover (tablet) in the central kitchen. Trays marked with ward, name & type (number) of diet
- Tablets put to heated mobile thermo-boxes & transported to wards
- Tablets distributed to patients & opened just before consumption
- Trays with leftovers put back to mobile thermo-boxes & transported to the central kitchen
 - The central kitchen deals with washing & waste disposal
 - No contamination possible in the ward “tea kitchens”

Meal serving in health facilities

- Meals served to mobile patients in a dining room, to immobile at bed
- **Meals served by staff**
 - Same requirements as for other food handlers
 - No patient help with any food handling!
- Meals for staff: Prepared separately, served in staff dining room

Individual food safety

Five keys to safer food



Keep clean

- ✓ Wash your hands before handling food and often during food preparation
- ✓ Wash your hands after going to the toilet
- ✓ Wash and sanitize all surfaces and equipment used for food preparation
- ✓ Protect kitchen areas and food from insects, pests and other animals

Why?

While most microorganisms do not cause disease, dangerous microorganisms are widely found in soil, water, animals and people. These microorganisms are carried on hands, wiping cloths and utensils, especially cutting boards and the slightest contact can transfer them to food and cause foodborne diseases.



Separate raw and cooked

- ✓ Separate raw meat, poultry and seafood from other foods
- ✓ Use separate equipment and utensils such as knives and cutting boards for handling raw foods
- ✓ Store food in containers to avoid contact between raw and prepared foods

Why?

Raw food, especially meat, poultry and seafood, and their juices, can contain dangerous microorganisms which may be transferred onto other foods during food preparation and storage.

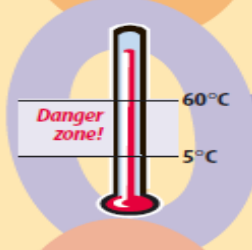


Cook thoroughly

- ✓ Cook food thoroughly, especially meat, poultry, eggs and seafood
- ✓ Bring foods like soups and stews to boiling to make sure that they have reached 70°C. For meat and poultry, make sure that juices are clear, not pink. Ideally, use a thermometer
- ✓ Reheat cooked food thoroughly

Why?

Proper cooking kills almost all dangerous microorganisms. Studies have shown that cooking food to a temperature of 70°C can help ensure it is safe for consumption. Foods that require special attention include minced meats, ribs, breasts, large joints of meat and whole poultry.



Keep food at safe temperatures

- ✓ Do not leave cooked food at room temperature for more than 2 hours
- ✓ Refrigerate promptly all cooked and perishable food (preferably below 5°C)
- ✓ Keep cooked food piping hot (more than 60°C) prior to serving
- ✓ Do not store food too long even in the refrigerator
- ✓ Do not thaw frozen food at room temperature

Why?

Microorganisms can multiply very quickly if food is stored at room temperature. By holding at temperatures below 5°C or above 60°C, the growth of microorganisms is slowed down or stopped. Some dangerous microorganisms still grow below 5°C.



Use safe water and raw materials

- ✓ Use safe water or treat it to make it safe
- ✓ Select fresh and wholesome foods
- ✓ Choose foods processed for safety, such as pasteurized milk
- ✓ Wash fruits and vegetables, especially if eaten raw
- ✓ Do not use food beyond its expiry date

Why?

Raw materials, including water and ice, may be contaminated with dangerous microorganisms and chemicals. Toxic chemicals may be formed in damaged and mouldy foods. Care in selection of raw materials and simple measures such as washing and peeling may reduce the risk.