

Own-check sampling in retail establishments

Retail establishments that carry out the processing (such as slicing, filleting, cutting, marinating) or production (such as cooking, heating, smoking, preparation of salads, etc.) of unpacked, perishable foodstuffs in service sales and/or the production of ice must incorporate sampling and testing into their own-check system. Retail establishments can carry out own-check sampling in-house or by establishing an agreement with an approved laboratory (listed in Finnish at <https://www.ruokavirasto.fi/laboratoriopalvelut/ruokaviraston-hyvaksymat-laboratoriot/elintarvikelaboratoriot/>). The sampling plans and the implementation thereof of retail establishments are assessed by an inspector in connection with Oiva inspections. More detailed instructions concerning tests and the numbers of samples are provided in the table at the end of these instructions. Any changes in the numbers of samples taken must be agreed upon with an inspector.

Provision on the obligation of the manufacturers of food products to carry out own-check sampling are provided in the EU Regulation on the Microbiological Criteria for Foodstuffs. The Finnish Food Authority has prepared a guide: Elintarvikkeiden mikrobiologiset vaatimukset komission asetuksen (EY) No 2073/2005 soveltaminen sekä yleisiä ohjeita elintarvikkeiden mikrobiologisista tutkimuksista - Ohje elintarvikealan toimijoille (4095/04.02.00.01/2020/4)

The guide is available (in Finnish) on the Finnish Food Authority's website at

- [elintarvikkeiden-mikrobiologiset-vaatimukset_4095_04_02_00_01_2020_4_liitteet-yhdistetty.pdf \(ruokavirasto.fi\)](https://www.ruokavirasto.fi/globalassets/tietoa-meista/asiointi/oppaat-ja-lomakkeet/yritykset/elintarvikeala/elintarvikealan-oppaat/liite-9-vahittaismyyntipaikka.pdf)
- and the appendix concerning retail establishments is available at <https://www.ruokavirasto.fi/globalassets/tietoa-meista/asiointi/oppaat-ja-lomakkeet/yritykset/elintarvikeala/elintarvikealan-oppaat/liite-9-vahittaismyyntipaikka.pdf>

In addition to the instructions detailed in this document, retail establishments may also be subject to other sampling requirements depending on their operations. For example, long storage times may require additional durability testing. Fish shops and fishers' establishments are subject to separate instructions.

Ice testing

The quality of any ice produced at food retail establishments that comes into contact with foodstuffs or is used in the production of foodstuffs **must be tested once a year**. Ice samples are tested for *Escherichia coli*, coliform bacteria and intestinal enterococci.

Listeria monocytogenes testing of foodstuffs

Perishable foodstuffs and ready-to-eat foods produced in retail establishments in which *Listeria monocytogenes* can grow and that have a **shelf-life of 5 days or longer** must be sampled for microbiological testing. Perishable foodstuffs, such as fresh salads, filled sandwiches, lightly salted fish, warm smoked fish, ready meals, etc., require cold storage.

Sampling of Finnish minced meat and raw meat preparations

Finnish minced meat and raw meat preparations produced in retail establishments must be sampled when the production volume is over 10,000 kg/year.

Sampling of foreign minced meat and raw meat preparations

Every batch of **foreign** minced meat, raw meat preparations, raw meat preparations made from poultry meat and meat preparations made from poultry meat **produced in retail establishments** must be sampled. Raw meat preparations include products in which the meat is cut and seasoned/marinated. Meat preparations

made from poultry meat include pre-cooked and pre-boiled products, for example. Five sample units are to be collected from each batch.

Surface sampling

Microbiological surface cleanliness samples must be collected from surfaces that come into direct contact with perishable foodstuffs and ready-to-eat foods. These surfaces can include worktops, tools and dishes. Sampling is based on the size of the area in which the foodstuffs are sold, the shelf-life of ready-to-eat foods and the origin of meat.

Surface cleanliness samples (aerobic microorganisms or enterobacteria) must be collected after cleaning or before the start of work from clean surfaces. The samples can be collected using Hygicult dipslides or other similar quick testing methods or by a laboratory.

Surface samples for *Listeria monocytogenes* testing must be collected primarily during work or immediately after work ends and before cleaning begins from areas and devices used to handle ready-to-eat foods when the shelf-life of the foodstuffs is 5 days or longer.

Surfaces in facilities used for the production of minced meat or meat preparations from foreign meat (such as meat mincers, saws, etc., tools and devices, worktops, handles) must be sampled for salmonella testing.

Results monitoring

As part of their own-check system, the operator must prepare a sampling plan that defines the samples to be collected, the tests conducted on the samples and the sampling frequency. The operator must monitor the results of the tests and react to them accordingly. If a test result indicates that microbiological quality is poor, the operator must determine the cause of the poor quality and collect a new sample after implementing corrective measures. Corrective measures must be recorded as part of the own-check system.

The operator must keep records of test results and analyse their development over the long term (trend analysis). This examination must be performed on an analysis-specific basis. In the event that a trend is declining, the operator must take immediate measures to prevent microbiological hazards even if the alarm limits have not yet been reached. If a trend has remained satisfactory for a long time, the sampling frequency can be reduced. At its simplest, trend analysis can be carried out by recording test results in a table in a notebook that shows how the results are trending.

Examples of trend analysis:

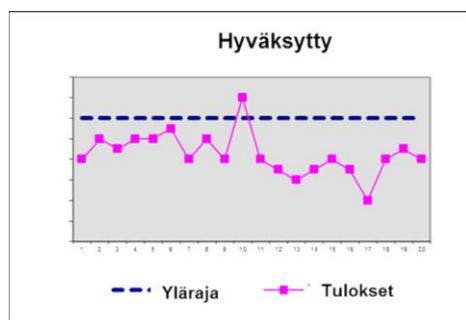


Figure 1. The situation is satisfactory in the context of an indicator. More often than not, the situation requires measures in the event of a pathogen.

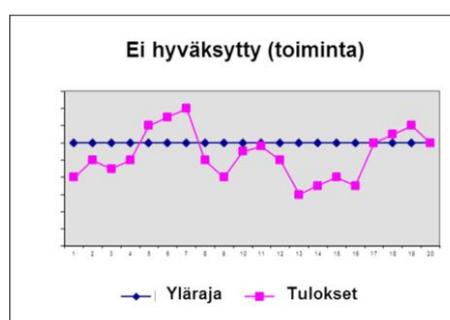


Figure 2. The situation is unsatisfactory. There is a recurring problem in the operations of the food premises.

Further information

Environmental Health Services of Porvoo, ymparistoterveydenhuolto@porvoo.fi,
<https://porvoonymparistoterveydenhuolto.fi/en>

Table: Minimum numbers of and tests to be conducted on the own-check samples of retail establishments.

Sample	Samples/year	Number of sample units	Tests
Ice	1	1	<i>Escherichia Coli</i> , coliform bacteria, enterococci
Ready-to-eat foods produced in the retail establishment (such as smoked fish/filled sandwiches/ready meals) with a shelf life of 5 days or longer			
retail establishment 200–1,000 m ²	4–6*	5	<i>Listeria monocytogenes</i> (tested on the last day of use)
retail establishment over 1,000 m ²	6–8*	5	<i>Listeria monocytogenes</i> (tested on the last day of use)
Made from Finnish meat ingredients 10,000–100,000 kg/y			
minced meat	4–6*	no	aerobic microorganisms when the minced meat has a shelf-life of 24 h or longer
minced meat, meat preparation	4–6*	no	<i>Escherichia coli</i>
Made from Finnish meat ingredients, over 100,000 kg/y			
minced meat	6–8*	no	aerobic microorganisms when the minced meat has a shelf-life of 24 h or longer
minced meat, raw meat preparation	6–8*	no	<i>Escherichia coli</i>
Made from foreign meat ingredients, under 10,000 kg/y			
minced meat, meat preparation, raw meat preparation from poultry meat, meat preparation from poultry meat	4	5	Salmonella
Made from foreign meat ingredients, 10,000–100,000 kg/y			
minced meat	4–8*	5	aerobic microorganisms when the minced meat has a shelf-life of 24 h or longer
minced meat, raw meat preparation	4–8*	5	<i>Escherichia coli</i>
minced meat, meat preparation, raw meat preparation from poultry meat, meat preparation from poultry meat	4–8*	5	Salmonella
Made from foreign meat ingredients, over 100,000 kg/y			
minced meat	8–12*	5	aerobic microorganisms when the minced meat has a shelf-life of 24 h or longer
minced meat, raw meat preparation	8–12*	5	<i>Escherichia coli</i>
minced meat, meat preparation, raw meat preparation from poultry meat, meat preparation from poultry meat	8–12*	5	Salmonella
Sample	Samples/year	Number of samples	Tests
Surface cleanliness sample, cleanliness monitoring			
retail establishment under 200 m ²	4–6*	5	aerobic microorganisms or enterobacteria
retail establishment 200–1,000 m ²	6–8*	5	aerobic microorganisms or enterobacteria
retail establishment over 1,000 m ²	8–10*	5	aerobic microorganisms or enterobacteria

Surface sample, <i>Listeria monocytogenes</i> (the retail establishment produces ready-to-eat foods (such as smoked fish/filled sandwiches/ready meals) with a shelf life of 5 days or longer)			
retail establishment under 200 m ²	4–6*	5	<i>listeria monocytogenes</i>
retail establishment 200–1,000 m ²	6–8*	5	<i>listeria monocytogenes</i>
retail establishment over 1,000 m ²	8–10*	5	<i>listeria monocytogenes</i>
Surface sample, salmonella (the retail establishment produces minced meat or meat preparations from foreign meat)			
retail establishment under 200 m ²	4–6*	5	salmonella
retail establishment 200–1,000 m ²	6–8*	5	salmonella
retail establishment over 1,000 m ²	8–10*	5	salmonella

*The number of samples must be proportional to the scope of operations, agreed upon with an inspector