

NATIONAL STANDARD METHOD

GUIDANCE NOTE

SPECIFICATION AND STANDARD COMMENTS FOR DAIRY PRODUCTS REPORT FORMS

QSOP 20

Issued by Standards Unit, Evaluations and Standards Laboratory
Specialist and Reference Microbiology Division

Association of Medical Microbiologists
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SPECIFICATION AND STANDARD COMMENTS FOR DAIRY PRODUCTS REPORT FORMS

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STATUS OF NATIONAL STANDARD METHODS

National Standard Methods, which include standard operating procedures (SOPs), algorithms and guidance notes, promote high quality practices and help to assure the comparability of diagnostic information obtained in different laboratories. This in turn facilitates standardisation of surveillance underpinned by research, development and audit and promotes public health and patient confidence in their healthcare services. The methods are well referenced and represent a good minimum standard for clinical and public health microbiology. However, in using National Standard Methods, laboratories should take account of local requirements and may need to undertake additional investigations. The methods also provide a reference point for method development.

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AMENDMENT PROCEDURE

Controlled document reference	QSOP 20
Controlled document title	Standard Operating Procedure for Specification and standard comments for dairy products report forms

Each National Standard Method has an individual record of amendments. The current amendments are listed on this page. The amendment history is available from standards@hpa.org.uk.

On issue of revised or new pages each controlled document should be updated by the copyholder in the laboratory.

Amendment Number/ Date	Issue no. Discarded	Insert Issue no.	Page	Section(s) involved	Amendment
22.08.05	4	4.1	1	Front page	Redesigned
			2	Status of document	Reworded
			4	Amendment page	Redesigned

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GUIDANCE NOTE ON THE SPECIFICATION AND STANDARD COMMENTS FOR DAIRY PRODUCTS TEST REPORTS

1. INTRODUCTION

- 1.1 This Guidance Note describes the specification and standard comments for test reports recommended for dairy product samples examined by the laboratory. These recommendations are not mandatory but should be consulted when revising test report formats. Details provided in italics are considered as optional.
- 1.2 The test report should show name / address / telephone and facsimile numbers of the laboratory performing the test / *e-mail address* / appropriate reference to the Health Protection Agency.
- 1.3 If the laboratory is accredited by UKAS for any of the test methods being reported the test report should also include reference to UKAS accreditation and the laboratory identification number.
- 1.4 A unique page number in the form of "Page 1 of 2" or "Page 2 of 2" should be placed at the bottom of each page if the report runs to a second page.
- 1.5 Formal samples, including those associated with suspected foodborne disease, may require an additional food certificate¹.
- 1.6 Health Protection Agency collaborating laboratories may wish to highlight this collaboration as a footnote to the report.

2. DEFINITIONS

- 2.1 **Formal sample** - is defined as any sample taken in accordance with the appropriate sampling Regulations²⁻⁴ that may ultimately be the subject of legal proceedings.
- 2.2 **Informal sample** – is defined in the Food Safety Act 1990² as those samples which are not dealt with in accordance with the Food Safety (Sampling and Qualifications) Regulations 1990^{3,4}. It is recognised that for monitoring or survey/surveillance purposes, enforcement authorities may wish to take samples for examination which will not be dealt with in accordance with the Regulations^{3,4} but in doing so they should be aware that the results may not be used as the basis for legal proceedings.
- 2.3 **Monitoring sample** – a sample taken to verify the processes used in production eg the pasteurisation and filling process at a dairy.
- 2.4 **Official control / statutory sample** - a sample obtained from a producer or heat treatment premises that is taken and tested in accordance with the procedures set out in the relevant legislation eg: The Dairy Products (Hygiene) Regulations 1995⁵.
- 2.5 **Food certificate** - this is a legal document. Under the Food Safety Act 1990² a food examiner is required, as soon as practicable, to give to the officer who submitted the formal sample a certificate specifying the result of the examination.

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2.6 **Food examiner** - is defined as a person designated by the laboratory as such on the basis of appropriate qualifications and experience detailed in The Food Safety (Sampling and Qualifications) Regulations 1990 (SI No. 2463)³. Further information is given in – Qualifications, experience and duties/responsibilities of Food Examiners in the Health Protection Agency, QSOP 28⁶.

2.7 **Sampling scheme**

2.7.1 **m** is the threshold value for bacterial count, result satisfactory if not exceeded.

2.7.2 **M** is the maximum value for bacterial count, result unsatisfactory if exceeded in any sample unit.

2.7.3 **n** is the number of sample units comprising the sample.

2.7.4 **c** is the number of sample units which may have bacterial counts between **m** and **M** if the bacterial count of the other sample units is **m** or less.

3. PRINCIPLES

3.1 To recommend a standard format for reporting test results of Local Authority dairy product samples by the Health Protection Agency.

4. INFORMATION REQUIRED ON THE REPORT FORM FOR ALL SAMPLES

NOTE: Additional details required for formal samples and those linked to suspected foodborne disease - see section 5.

Each test report should include at least the following information, unless the laboratory has valid reasons for not doing so.

- a) A title (eg: Test Report)
- b) The name and address of the laboratory where the tests were carried out
- c) Reference to UKAS accreditation and the laboratory accreditation number (if the laboratory is accredited for the tests)
- d) *Footnote indicating the collaborative status of the laboratory with the Health Protection Agency*
- e) Page number
- f) Sender's details – name/address and sender's reference number (including code on tamper-evident tags)
- g) Sample details – date *and time* of collection, date and time of receipt, date of examination
- h) Sample type and description

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- i) Sampled by, place of sampling, *sampling point*
- j) Reason for examination, eg: surveillance, suspect food poisoning outbreak, formal, statutory, complaint, spoilage
- k) Test, test results and method number
- l) Name and function of person authorising the test report
- m) Date report issued
- n) Interpretation
- o) Comments eg: incidents that may have affected the results
- p) Disclaimers
- q) Clarifications (optional)

5. ADDITIONAL INFORMATION FOR FORMAL AND OUTBREAK SAMPLES

5.1 For extensive guidance see Health Protection Agency Guidance Note - Handling of Formal Samples in the Laboratory, QSOP 17¹.

5.2 Documentation of sample submission¹.

5.3 Certificate of examination. The requirement for a certificate of examination for a formal sample should be discussed with the submitting authority and a record of the requirement kept. A food certificate is generally only issued if unsatisfactory or unacceptable results have been obtained from a formal sample. A food certificate would only be issued for satisfactory results if specifically requested by the Local Authority¹.

6. STANDARD COMMENTS

6.1 **Samples (cheese, ice-cream, edible ices, yoghurt etc) taken at non-producer premises, eg: retail and catering premises⁷:**

6.1.1 Caution should be exercised when interpreting results for these samples. For unopened packs the criteria for samples taken at the producer or heat treatment premises may be applied. For opened packs, criteria for *Escherichia coli* and *Staphylococcus aureus* contained in the PHLS guidelines⁷ may also be appropriate. For unopened or opened packs, criteria for *Listeria* species in the PHLS guidelines⁷ are appropriate.

6.2 **Samples taken at the producer or heat treatment premises:**

6.2.1 Satisfactory results

Satisfactory - Results comply with the Dairy Products (Hygiene) Regulations 1995⁵.

6.2.2 Other results:

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6.2.2.1 Raw milk - plate count or coliforms, standard exceeded
Unsatisfactory - Plate count / coliform count fails to comply with the standard specified in the Dairy Products (Hygiene) Regulations 1995⁵.

6.2.2.2 Pasteurised milk

Single samples, count >m but <M

Coliform / pre-incubated plate count fails to comply with the m value specified in the Dairy Products (Hygiene) Regulations 1995⁵

5 samples, c = 1, count >m but < M, M not exceeded in any sample

Acceptable quality (but warrants further investigation)

Any sample count > M, or 5 samples c > 1, count >m but < M

Unsatisfactory - Coliform / pre-incubated plate count fails to comply with the standard specified in the Dairy Products (Hygiene) Regulations 1995⁵

6.2.2.3 Sterilized / UHT milk

Unsatisfactory - Pre-incubated plate count fails to comply with the standard specified in the Dairy Products (Hygiene) Regulations 1995⁵.

6.2.2.4 Cheese /liquid/frozen/powdered milk products /cream / yoghurt/ butter etc

(not all parameters applicable to all products)

All samples;

Unsatisfactory - *Listeria monocytogenes* detected*.

Unacceptable/potentially hazardous - *Salmonella* species detected*.

*Ensure that the report specifies the weight examined.

Single samples;

Borderline quality - *Staphylococcus aureus* / *Escherichia coli* count fails to comply with m value specified in the Dairy Products (Hygiene) Regulations 1995⁵.

Unsatisfactory quality - Coliform count fails to comply with m value recommended in the Dairy Products (Hygiene) Regulations 1995 – Guidance Notes⁸.

5 samples, count >m but < M, c = 1 or 2, M not exceeded in any sample;

Acceptable quality (but warrants further investigation).

Any sample count >M, 5 samples c > 2;

Unsatisfactory - *Staphylococcus aureus* / *Escherichia coli* count fails to comply with the standard specified in the Dairy Products (Hygiene) Regulations 1995⁵.

Unsatisfactory quality - Coliform count fails to comply with m guideline value specified in the Dairy Products (Hygiene) Regulations 1995 – Guidance Notes⁸.

NOTE: m and M should be defined in a comment on the report:

m = Threshold value; result satisfactory if not exceeded in any sample unit.

M = Maximum value; result unsatisfactory if exceeded in any sample unit.

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6.2.2.5 Phosphatase (Fluorophos method)^{9,10}

Report level:

Level below 100 mU/L - Satisfactory phosphatase level.

Level 100 - 500 mU/L - level satisfies statutory requirement^{5,11}; the level of phosphatase detected is due to reactivation / bacterial phosphatase / presence of bovine / ovine / caprine phosphatase.

If mammalian phosphatase is present a further comment should be made:

This indicates inadequate processing or contamination with unpasteurised milk even though it satisfies the statutory requirement. Further investigation is indicated.

Level above 500 mU/L (due to bovine / ovine / caprine phosphatase) - Phosphatase level exceeds the equivalent of the standard specified in current legislation^{5,11}. Indicates inadequate processing or contamination with unpasteurised milk.

NOTE: Further tests on samples containing more than 100 mU/L should always be carried out to determine the nature of the phosphatase present.

CONTACT

Any queries relating to this Guidance Note should be made to:

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