

Report of the 19th Workshop of the EURL/NRLs for Milk and Milk Products (2016)

The 2016 workshop was held at ANSES - Food Safety Laboratory, 23, Avenue du Général de Gaulle, Maisons-Alfort, France, on 5-7th October. The meeting agenda is attached. The UK NRL was represented by Mark Linton of AFBI.

Prior to the workshop a meeting of the Working Group on harmonisation of conversion factors was held, chaired by Dr Bertrand Lombard. The working group meeting was updated on the current situation regarding the implementation of the EU conversion factor, the details of which were previously circulated in a report. No factors affecting the conversion factor (e.g. seasonality, year etc.) were shared between all countries, so these were not considered in drawing up the conversion factor. The EURL highlighted the importance of using results from milk with high counts to take account of the fact that geometric means are used for regulatory levels.

Some corrections are to be made to the report and the corrected version will be circulated to all NRLs.

The EURL have assumed that the impact on compliance with regulatory limits would be minimal as compliance is based on geometric means. However, many countries found it difficult to assess the impact of the unified conversion factor compared with their national one, so an excel spreadsheet is to be prepared that will allow all countries to assess the impact at national level. A draft version of this spreadsheet will be circulated to the members of the working group to test before it is circulated more widely.

Concerns were raised about the calculation of the harmonised conversion factor because some countries (around 50%) use preservatives in milk samples for testing by Bactoscan. The EURL was not concerned about this as they found no correlation between the discrepancy from the unified conversion factor and the use of preservatives for any country. A report from the Swiss showed that the unified conversion factor would slightly favour their milk producers compared to using the national conversion factor.

Italy raised a number of concerns about the way the harmonised conversion factor was calculated, but acknowledged that the use of the harmonised conversion factor would have very little impact in their country as the national equation was very similar.

The harmonised conversion factor was recommended for implementation, but each country would be free to choose whether or not to adopt it.

The issue of maintenance of the equation is to be discussed at the next meeting, which is to be held just before the next workshop.

The Workshop was opened with an introduction by the head of the EURL, Dr Laurent Laloux. Dr Bertrand Lombard chaired the meeting. All of the presentations on the agenda have been made available on the EURL website.

The results of the 2015 PT trial for enumeration of somatic cells counts were discussed. A magnification of 400× is commonly used instead of 500× (as required in the ISO method). A study was carried out to determine if this has any effect on the counts. The conclusion was that there is no significant difference, so a 400× magnification may be used for any upcoming PT trials and for accreditation purposes. The results of the study are to be sent to IDF ISO for inclusion in a revision of ISO 13366.

A number of critical control points for the determination of somatic cell counts were identified to assist laboratories carrying out the reference method.

The instructions for the upcoming PT trial for the total flora in raw cow's milk were discussed.

The report of the working group meeting on the harmonisation of the conversion factor was presented. Comments on the effects on each country of the introduction of a harmonised conversion factor were requested. Many countries were unable to assess the impact. Mark Linton reported that although the use of the EU harmonised conversion factor instead of the UK one would result in higher counts, in practice the effect would be minimal as quality payments are already based on Bactoscan counts.

Belgium was not keen to implement the EU conversion factor as it would result in a reduction in the number of farms receiving quality payments. In addition they questioned

the use of an equation that was derived using results from countries that allowed the use of preservatives.

A calculator is to be sent to all NRLs which will allow them to assess the impact of the conversion factor and the answers will be used for an impact statement which will be discussed at the next workshop in May. For those countries wishing to do so, the EU conversion factor may be implemented at national level from Jan 2017.

There is an understanding that the reference method (microscopy) for SCC is poor in terms of repeatability and reproducibility and a new reference method may be more appropriate. The other automated methods available may score better for repeatability and reproducibility but are more expensive and not as flexible. Work is on-going to identify a suitable reference method that would allow a well defined measurand.

Work is also ongoing to prepare a source of certified reference materials for labs carrying out SCC in raw milk.

The results of the 2015 PT trial for ALP in cow milk were discussed. A high level of ALP in one of the samples was used to assess how labs manage an unexpectedly high level.

The plans for the upcoming PT trial for ALP in cheese were discussed. The workshop was reminded that the ISO method (ISO11816-2:2016) has recently been updated with details in part 2 for the determination in cheese.

The results from two studies on the determination of ALP in cream were presented. A number of problems have still to be overcome, not least the problem with reactivation of ALP in cream over time.

Sylvie Coulon provided an update from DG SANTE and there was a reminder of the requirement for all NRLs to participate in PT trials for tests relating to regulatory requirements.

The workshop was updated on the progress of trials on a fluorimetric microwell assay to replace the Fluorophos as the reference method for the determination of ALP. If successful, this would allow the use of an open method not linked to a sole supplier of equipment and

reagents. Initial results look promising but a larger scale trial will be required. The procedure has to be further optimised and then it will be sent out for comment. After that participation in the pilot trials will be requested.

Work is ongoing to determine pasteurisation tracers for exotic milks.

A limit of 10mU/ml ALP has been set for cheese made with pasteurised cow milk. There has not been a legal limit set for cheese made from goat milk. Further work would need to be carried out to assess if the same legal limit is suitable and some breeds of goats may need to be excluded from the legislation.

The meeting ended with a summary of the planned work for 2016-17.

The new work programme needs to be submitted to DG SANTE by summer 2017 so the next workshop will take place in early June 2017.

Mark Linton

12th October 2016



Wednesday 5 October 2016

12:00-13:15 Lunch (optional)

- 13:15-13:30 Registration
- 13:30-13:45 Welcome and opening of the workshop (Laurent LALOUX, Head of the EURL for Milk and Milk Products (MMP))
- 13:45-14:30 Presentation of the workshop (Bertrand LOMBARD, EURL MMP)
Roll call of participants
Evaluation of 2015 Workshop (Adrien ASSÉRIÉ, EURL MMP)

General aspects (1/2)


- 14:30-14:50 risk assessment linked to direct consumption of raw milk (Pauline KOOH, ANSES, DER)


Hygiene of raw milk

- (14:50-17:00)
Introduction (Nathalie GNANOU-BESSE, EURL MMP)
Enquiry on condition of transport of milk samples to the laboratories (N. GNANOU-BESSE)

15:30-16:00 Break

- 2015 PT trial dedicated to SCC in raw cow's milk (J.-A. HENNEKINNE)
2016 PT enumeration of total flora in raw cow's milk (N. GNANOU-BESSE)
Comparison of 40 50 magnification lenses for SCC (N. GNANOU-BESSE)
Critical points for implementation of the reference method for SCC (N. GNANOU-BESSE)

-  17:00-17:30 Danish cheese tasting 
Kindly organised by our colleague from the DK-NRL
Erik DAHM

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Thursday 6 October 2016

Hygiene of raw milk (2/2)

- (9:00-13:00)
WG Harmonisation of the conversion characteristic for Total Flora (N. GNANOU-BESSE)
National replies to the enquiry: 5' each per countries

10:30-10:45 Break

- Revision of the ISO 21187/IDF 196 and applicability of conversion factor (Vesela TZENEVA, QLIP, NL)
Microval certification of flow cytometers for Total Flora and somatic cells (V. TZENEVA)
IDF ICAR reference system for SCC (Thomas BERGER, Agroscope, CH-NRL)
IDF ISO work for a new SCC method (T. BERGER)
Development of CRM for SCC in raw milk (R. HENNEKINNE & Reinhart ZELENY)

13:00-14:00 Lunch

Pasteurisation tracers 1/2

- (14:00-16:30)
Introduction (Hanène GHEZZAL, EURL MMP)
2015 PT trial: ALP in cow milk (H. GHEZZAL, EURL MMP)
2016 training session and PT: AP in cheese (AC. BOITELLE, EURL MMP)

15:15-15:30 Break

- Alkaline phosphatase in cream: A preliminary study (Luigia PELLEGRINO, invited expert)
ALP in cream: Progress, problems, and prospects (H. GHEZZAL)

Social event

- Visit of Fragonard Museum (17h – 18h15)*
A common dinner is organized on Thursday evening
Restaurant « Au Bistro de la Montagne » (19h30)
common departure from Ecole Vétérinaire d'Alfort Metro line 8 Station at 18h30

Friday 7 October 2016

General aspects (2/2)

- 9:30-9:45 Update from DG SANTE (Sylvie COULON, EC G4)
9:45-10:15 Follow up of NRL participation and performance to NRLs PTs (A. ASSERE)

Pasteurisation tracers 2/2

- (10:15-11:45)
Validation of an Alkaline Phosphatase Fluorometric Microwell Assay (T. BERGER)
Microwell fluorometric method for ALP: Preliminary comparison assays. (H. GHEZZAL)

10:30-10:45 Break

- Update of the standardization work - outcome of 2016 IDF ISO analytical week (H. GHEZZAL, EURL MMP)

Conclusion of the workshop

- Update 2016-2017 programme of work

Any other items

Closure

13:00-14:00 Lunch optional

Lunches

- Thursday (13:00-14:00)
On demand for Wednesday (12:00) and Friday (13:00)
Payment by cash at our cafeteria (around 10€ per meal)

Important

- Note that the meeting will be held at the laboratory:
14, rue Pierre et Marie CURIE, MAISONS-ALFORT
Copernic Building – Snow meeting

