

Newsletter for the Nordic Committee on Food Analysis

Contents

Page 2

- The members of NordVal
- How to get a NordVal approval / certificate
- International cooperation and participation in IAM and Codex Alimentarius – airy thoughts

Page 3

- NordVal approved methods

Page 4

- Airy thoughts, continued
- NMKL Methods endorsed by Codex

Page 5

- Comparison of NMKL and ISO Methods: Are the methods equivalent?

Page 6

- PAH – Request for participants in collaborative trial

Page 7

- New NMKL Procedure No. 19, 2007: Guideline for sensorial analysis of food packaging materials
- Amendments to NMKL Methods

Page 8

- Methods in progress
- Price list
- Available NMKL Procedures

The NMKL WEB page:

www.nmkl.org

E-mail:

nmkl@vetinst.no

NORDVAL TO NMKL

NordVal - an independent third-party, reviewing alternative methods

NordVal was established in 1999, by recommendation of NMKL, and has since then reviewed a number of microbiological methods. The scope of NordVal is to review test-kit performances and fitness for purpose, in order to see if the methods are in accordance with their claims. NordVal has focused on alternative, microbiological methods for the analysis of foods, water, feeds, animal faeces and food environmental matrices.

NordVal is taken over by NMKL

In January 2007, the previous host of NordVal, the Danish Veterinary and Food Administration, informed NMKL in a letter that they would like to withdraw from the NordVal activities. At the NMKL executive meeting in February, NMKL decided to include NordVal as an NMKL project. NordVal's activities will continue under the framework of NMKL. Approved test-kits will be followed up, and new applicants are welcomed. The validations will be conducted according to the same validation protocol as previously used by NordVal.



NordVal offers:

- A user-friendly validation protocol
- Scientific confirmation policies
- Specified acceptance criteria
- Independent and rapid approval procedures
- Guidance in the validation process

Status of the NordVal accepted alternative methods

EU Commission Regulation (EC) 2073/2005 of 15 November 2005, on microbiological criteria for foodstuffs, Article 5: "Specific rules for testing and sampling", says: "*The use of alternative analytical methods when the methods are validated against the reference method in Annex 1, and if a proprietary method, certified by a third party in accordance with the protocol set out in EN /ISO Standard 16140 or other internationally accepted similar protocols is used.*"

NordVal's protocol is one of these internationally accepted protocols, and is also referred to in the EU Regulation for the *Salmonella* control programme, as well as in ISO 16140.

When may alternative (rapid) methods be used?

Use of alternative (rapid) methods can be time- and effort-saving when checking

- raw materials
- new operations
- effects of hurdle technology
- effects of cleaning
- the quality of finished goods in HACCP verification programs
- compliance with microbiological criteria

To be continued.

The members of NordVal

Chairman: Sven Qvist, Denmark,
E-mail: sven@qvist.com

Last year, Sven Qvist stepped down as the chairman of NordVal as he was about to retire. Sven had then been the leader of NordVal from the very beginning. It seems that when he left, the activities in NordVal were no longer prioritised. NMKL is very grateful that Sven is willing take the leadership of NordVal again. In fact, he has already started.



NMKL is also very pleased that the members of the previous steering group are willing to continue under the framework of NMKL. In addition to Sven Qvist from Denmark, NordVal consists of:

Finland: **Taina Niskanen**, Finnish Food Safety Authority, Evira

Iceland: **Franklin Georgsson**, Food Research, Innovation & Safety, Matis

Norway: **Kjell Hauge**, Norwegian Food Safety Authority

Sweden: **Åsa Rosengren** and
Per Norberg, National Food Administration

How to get a NordVal approval/certificate

An application for validation of a method is submitted to the NordVal/NMKL secretariat using a NordVal application form.



NordVal evaluates the application. If the application is approved, NordVal nominates a technical committee of experts. The technical committee and an appointed expert laboratory, elaborate a test protocol in accordance with the NordVal protocol. At this stage, consultation with the applicant is appropriate (on extent of work, supply of test materials, choice of reference method, choice of test strains, economy etc.)



NordVal considers the test protocol for approval. When approved, the method comparison study of the alternative method against a reference method (performed by an expert laboratory), and the collaborative study of the alternative method (organised by an expert laboratory), are carried out.



The technical committee reviews the reports of the studies, and forwards its conclusions and advice to NordVal.



NordVal informs the applicant of the results and outcome. NordVal issues the certificate for approval for that particular method.



NordVal presents information on the approval of the alternative method in the NMKL bulletin as well as on the internet, and also forwards the information to the National Food Administrations in the Nordic countries.

Alternative methods are reviewed every 2 years.

For any questions about NordVal, please contact the Chairman of NordVal Sven Qvist (sven@qvist.com) or NMKL Secretary General Hilde Skaar Norli (nmkl@vetinst.no).

The application form is available under NordVal on NMKL's homepage: www.nmkl.org

INTERNATIONAL COOPERATION AND PARTICIPATION IN IAM AND CODEX ALIMENTARIUS

AIRY THOUGHTS

I am sitting on the plane on my way back home to Norway from a week (weekend included) of meetings in Budapest. I have participated at the Inter Agency Meeting (IAM) and the meeting of the Codex Committee on Methods of Analysis and Sampling (CCMAS).



A week away from the office means piled up work, another week to catch up, and I question myself - have these meetings been worth the effort? Hmm... getting together with other international method organisations in a forum for discussing harmonization, exchanging information and discussing cooperation; that is rather unique and indeed it has to be considered meaningful.

Representatives from AOCS, ISO, ICC, Codex, CEN, BIMP, EURACHEM, IUPAC and NMKL participate at the IAM; i.e. international organisations working in the field of methods for the analysis and sampling of food products and/or associated quality assurance measures. Some of the specific items discussed were:

- The Criteria Approach; method characteristics such as accuracy, trueness, applicability and precision are to be given in Codex standards rather than by approving specific methods. This means that it is even more important for method organisations to include such information in the method
- Harmonisation of Analytical Terminology - Definitions (available on the NMKL web site)
- The use of Recovery Correction in Collaborative Trials
- Guidelines for Evaluating Acceptable Methods of Analysis
- International Guidelines for the Validation of Qualitative Methods.

These are all topics of great interest to NMKL, so how can I even question the importance of my attendance...

*The minutes of the IAM will be available on the IAM web site:
www.aocs.org/meetings/iam/*

The secretariat of IAM is hosted by AOCS (American Oil Chemists Society), and the secretary is Dr. Richard Cantrell, AOCS's Technical Director.



The chair of IAM is Dr. Roger Wood, IUPAC International Union of Pure and Applied Chemistry.

.... IAM was on Friday, what about the rest of the week in Budapest? Budapest is a lovely city, being a tourist would not be a bad option, but not this time.

Continued on page 4.

ALTERNATIVE METHODS WITH A NORDVAL APPROVAL

Analyte	Kit name	Company	Matrices	Reference method
Aerobic microorganisms	3M Petrifilm, Aerobic Count Plate	3M Health Care, USA	All foods	ISO 4833:2003
Aerobic microorganisms and presumptive <i>Enterobact.</i>	Hygicult TPC	Orion Diagnostica Finland	Surface hygiene monitoring	NMKL 5: 2001
<i>Campylobacter</i>	AccuProbe <i>Campylobacter</i>	Genprobe, USA	All foods	NMKL 119:1990
<i>Campylobacter</i>	<i>Campylobacter</i> real-time PCR	Danish Institute for Food and Veterinary Research.	Raw chicken meat. Faeces on cloacae swabs.	NMKL 119: 2002 (draft version) ISO 10272-1: 2004
Coliform bacteria	3M Petrifilm, Coliform Count Plate	3M Health Care, USA	All foods	ISO 4832:1991
Coliform bacteria / <i>E.coli</i>	3M Petrifilm <i>E.coli</i> /Coliform Count Plate	3M Health Care, USA	All foods	ISO 4832: 1991 ISO 16649-2: 2001
<i>E.coli</i>	RAPID' <i>E.COLI</i> 2 AGAR	Bio-Rad, France	All foods	ISO 16649-2: 2001, ISO 4832: 1991
<i>E.coli</i>	3M Petrifilm Select <i>E.coli</i> Count Plate	3M Health Care, USA	All foods	ISO 16649-2:2001
<i>E.coli</i> /Coliform bacteria	3M Petrifilm <i>E.coli</i> /Coliform Count Plate	3M Health Care, USA	All foods	ISO 4832: 1991 ISO 16649-2: 2001
<i>E.coli</i> O157	LightCycler <i>E. coli</i> O 157 Detection Kit	Roche Diagnostics, Germany	All foods, environmental samples	ISO 16654:2001
<i>Enterobacteriaceae</i>	3M Petrifilm <i>Enterobacteriaceae</i> Count Plate	3M Health Care, USA	All foods	ISO 21528-2:2004
<i>Listeria</i>	Transia Plate <i>Listeria</i>	Diffchamb, Sweden	All foods	ISO 11290-1:1997
<i>Listeria</i>	Vidas <i>Listeria</i>	Biomerieux, France	All foods, environmental samples	ISO 11290-1:1997
<i>Listeria</i>	Vidas <i>Listeria monocytogenes</i> II	Biomerieux, France	All foods, environmental samples	ISO 11290-1:1997/Amd 1:2004
<i>Listeria</i>	RAPID' <i>L.MONO</i>	Bio-Rad, France	All foods, environmental samples	ISO 11290-1:1997
<i>Listeria</i>	Oxoid <i>Listeria</i> Rapid Test	Oxoid, UK	All foods	ISO 11290-1:1997
<i>Listeria</i>	LightCycler <i>L.mono</i> Detection Kit	Roche Diagnostics, Germany	All foods, environmental samples	ISO 11290:1996 / Amd 1:2004
<i>Listeria monocytogenes</i>	AccuProbe <i>Listeria mono.</i>	Genprobe, USA	All foods	NMKL 136:1999
<i>Salmonella</i>	Bioline <i>Salmonella</i> Optima	Bioline, Denmark	All foods, animal feeds	ISO 6579:2002
<i>Salmonella</i>	Bioline <i>Salmonella</i> Selecta	Bioline, Denmark	All foods, animal feeds	ISO 6579:2002
<i>Salmonella</i>	EiaFoss <i>Salmonella</i>	Foss Analytical, Denmark	Meat and meat products	NMKL 71:1999
<i>Salmonella</i>	Transia Plate <i>Salmonella</i> Gold	Diffchamb, Sweden	All foods, animal feeds, environmental samples	ISO 6579:2002
<i>Salmonella</i>	Vidas <i>Salmonella</i>	Biomerieux, France	All foods	ISO 6579:2002
<i>Salmonella</i>	Vidas <i>Salmonella</i> ICS	Biomerieux, France	All foods	ISO 6579:2002
<i>Salmonella</i>	LightCycler <i>Salmonella</i> Detection Kit	Roche Diagnostics, Germany	All foods, animal feeds, environmental samples	ISO 6579:2002
<i>Salmonella</i>	IQ Check <i>Salmonella</i> Kit	Bio-Rad, France	All foods, animal feeds, environmental samples	ISO 6579:2002
<i>Staphylococcus</i>	3M Petrifilm Express Count System	3M Health Care, USA	All foods	ISO 6688-1:1999
<i>Staphylococcus aureus.</i>	RAPID' <i>STAPH</i>	Bio-Rad, France	All foods, environmental samples	ISO 6888-1:1999/Amd. 1:2003
Yeast and Mold	3M Petrifilm Yeast and Mold Count Plate	3M Health Care, USA	All foods	BAM 8th Ed. 2001

Continued from page 2.

Saturday, there was the meeting in the Method Endorsement Committee of CCMAS (Codex Committee on Methods of Analysis and Sampling). Lists of methods submitted for approval from Codex Commodity Committees are reviewed. It is very important for NMKL as well as other method organisations to attend this committee. The organisations have knowledge about the methods and their performance characteristics and hence should advise the committee when reviewing the list whether or not the methods should be endorsed.

Looking at the method proposals submitted for endorsement, it is obvious that the commodity committee members' fields of expertise are on topics other than analytical methods. On the other hand, the endorsement committee is not very familiar with the maximum limits specified for analytes in different commodities. Therefore, methods that are not fit for their purpose, might be endorsed. The proposals made by the endorsement committee were discussed at the CCMAS meeting which ran from Monday to Friday (5-9 March).

Unfortunately (and as already mentioned), some methods endorsed by Codex are not fit for their purpose. This problem was addressed in a document presented by NMKL. **As maximum limits given for an analyte in a commodity are not considered when endorsing methods, methods with detection limits higher than the maximum levels have actually been endorsed in Codex.** In the paper, this was shown to be the case for some trace element methods.

A project group in NMKL, with Lars Jorhem from the National Food Administration Sweden as project leader, had reviewed for CCMAS the collaborative studies of all the methods for trace elements endorsed by Codex. **The performance characteristics of the methods for these contaminants were then compared with the respective maximum limits. This showed that for some contaminants, methods with detection levels of 2-10 times the maximum level, had been endorsed. Furthermore, it was shown that some of the methods for trace elements in Codex are withdrawn methods, some are surplus and some are not validated for the level or matrices of interests.** NMKL had put a lot of effort into this CCMAS paper. But did the message get through? As the next agenda item, the committee endorsed a method for trace elements with a detection level twice the maximum level of the contaminant of interest. This means that it is impossible for a laboratory to detect that trace element around the specified maximum level. What a waste of time and effort! All this work for nothing? I should have stayed in my office getting methods ready instead! I know things take time in Codex and I suppose our message needed time to sink in. It was decided that the methods for the relevant contaminants should be considered at the next endorsement meeting of CCMAS, so maybe it wasn't a total waste after all. Further, it was decided that Sweden, Norway and NMKL should revise the document presented by NMKL for the next meeting, in order to develop guidelines for the conversion of methods into criteria for Codex committees and for government authorities, as appropriate.

The hottest topic in this 28th session of CCMAS, was probably the Draft Guideline for Settling Disputes on Analytical (Test) Results. There were certainly "disputes" about the Dispute document, and Professor Peter Biacs, the chair of the meeting had a challenging task. With **155 participants representing 55 countries and 8 international organisations**, and a requirement that the countries reach consensus, no wonder things take time. As this Dispute document will come up next year, I will write more about it later, especially as I am now approaching Oslo airport. However, I would like to mention that a need for a better understanding of measurement uncertainty was uncovered, and hence the IAM, NMKL included, will be arranging a symposium on Measurement Uncertainty in connection with the CCMAS session next year. CCMAS is a unique forum for discussions and networking, and NMKL's participation in this forum from its very beginning, is probably one of the reasons why NMKL has interested parties from more than 40 countries outside the Nordic countries. Before turning off my PC for landing, I think I can conclude that the meetings have been important for NMKL. And last but not least; the networking with the IAM and CCMAS members is of great significance.

HSN 9. March 07

A complete report of the meeting is available at www.codexalimentarius.net.

NMKL METHODS ENDORSED IN CODEX:

- **NMKL 39, 2003:** Iodine value. Determination in fats and oils (Wij's method)
- **NMKL 103, 1984:** Benzoic acid and sorbic acid in foods. Quantitative determination by gas chromatography
- **NMKL 122, 1997:** Saccharin. Liquid chromatographic determination in beverages and sweets
- **NMKL 123, 1998:** Cyclamate. Spectrophotometric determination in foods
- **NMKL 124, 1997:** Benzoic acid, sorbic acid and p-hydroxybenzoic acid esters. Liquid chromatographic determination in foods
- **NMKL 132, 1989:** Sulphite. Spectrophotometric determination in foods
- **NMKL 135, 1990:** Sulphite. Enzymatic determination in foods
- **NMKL 139, 1991:** Metals. Determination by atomic absorption spectrophotometry in foodstuffs.
- **NMKL 148, 1993:** Fructose, glucose and saccharose. Liquid chromatographic determination in fruit and vegetable products
- **NMKL 153, 1996:** Magnesium and calcium. Determination by atomic absorption spectrometry after wet digestion in a microwave oven.
- **NMKL 161, 1998:** Metals. Determination by atomic absorption spectrophotometry after wet digestion in a microwave oven
- **NMKL 165, 2000:** Nitrite and Nitrate. Nitrite and/or nitrate in foodstuffs by ion chromatography.
- **NMKL 179, 2005:** pH. Determination in foods.
- **NMKL 182, 2005:** PSP toxins. Determination of paralytic shellfish poisoning toxins in shellfish by HPLC/ fluorescence.

The Codex Alimentarius Commission was established in 1963 by FAO and WHO, in order to develop food standards, guidelines and related texts such as codes of practice under the Joint FAO/WHO Food Standards Programme. The main purposes of this Programme are protecting the health of the consumers and ensuring fair trade practices in the food trade, as well as promoting the coordination of all food standards work undertaken by international governmental and non-governmental organizations.

FAO/WHO Food Standards

CODEX alimentarius

COMPARISON OF NMKL AND ISO METHODS: IS THE METHODS EQUIVALENT?

Nordic experts have reviewed NMKL and ISO methods in order to find out whether or not the methods may be regarded as equivalent. The methods considered are methods of interest laid down in the Annex of Commission Regulation (EC) No. 2073/2005 on microbiological criteria.

The reasons for the comparisons are:

- The reference methods in the Annex of Commission Regulation No. 2073/2005, refer to ISO standards only. In order to use NMKL methods, the methods should be proven equivalent to the reference methods.
- Most of the ISO standards are not collaboratively tested, and hence if an NMKL and ISO standard are considered equivalent, ISO may adopt the study results of the particular NMKL method. As it is important to have collaboratively validated methods as reference methods, the EU Commission has given CEN mandate to collaboratively validate the specific ISO standard. The commission has requested NMKL to contribute, as NMKL may have equivalent validated methods, and as NMKL's referees have experience in arranging collaborative method performance studies.

The table below gives a very brief summary of the comparisons between the ISO standards referred to in EC 2073/2005, and the respective NMKL methods. The experts' complete comparisons of the methods are available as pdf-files on NMKL's homepage: www.nmkl.org.

NOTE! CRITERIA is a common word these days related to chemical and microbiological analysis, but it does not always mean the same.

Criteria – chemistry: The word criteria is used for method characteristics and is related to method performances (criteria are given for detection level, accuracy/trueness, precision etc.). It gives a freedom to use the method of choice, as long as it corresponds with the specified criteria.

Criteria – microbiology. In microbiology, the word criteria is used in connection with the number of samples to withdraw, the maximum levels and the specific method that is to be used as reference method.

MICROORGANISM	METHODS		EQUIVALENT YES/NO
<i>Listeria monocytogenes</i>	EN/ISO 11290-1 + 2 Horizontal method for the detection and enumeration of <i>Listeria monocytogenes</i> Part 1: Detection method Part 2: Enumeration method (part 1 is collaboratively validated, but not part 2)	NMKL 136 <i>Listeria monocytogenes</i> . Detection and enumeration in foods and feed stuffs (collaboratively validated)	YES
<i>Salmonella</i>	EN/ISO 6579 Horizontal method for the detection of <i>Salmonella</i> spp. (prev. version collaboratively validated)	NMKL 71 <i>Salmonella</i> . Detection in foods. (collaboratively validated)	YES
<i>E.coli</i>	ISO 16649 Horizontal method for the enumeration of beta-glucuronidase-positive <i>Escherichia coli</i> Part 1: Colony-count technique at 44°C ... Part 2: Colony-count technique at 44°C ... Part 3: Most probable number technique ... (not collaboratively validated)	NMKL 125 Thermotolerant coliform bacteria and <i>Escherichia coli</i> . Enumeration in foods and feeds. (collaboratively validated) NMKL 96 Bacterial Examination in Fresh and Frozen seafood. (collaboratively validated)	NO However, probably interchangeable as they cover more or less the same area. None of the methods cover <i>E. coli</i> that does not grow at lower temperatures (such as <i>E. coli</i> O157), but both methods will work fine for the enumeration of <i>E. coli</i> for hygiene purposes.
Aerobic microbes – surfaces	ISO 4833 Horizontal method for the enumeration of microorganisms. Colony-count technique at 30°C . (collaboratively validated on raw and pasteurized milk)	NMKL 5 Aerobic microorganisms and presumptive <i>Enterobacteriaceae</i> . Enumeration on surfaces and utensils. (collaboratively validated)	NO Different principle. NMKL: swab + contact plate ISO: colony count

MICROORGANISM	METHODS		EQUIVALENT YES/NO
<i>Enterobacteriaceae</i> – surface	ISO 21528-2 Horizontal method for the detection and enumeration of <i>Enterobacteriaceae</i> - Part 2: Colony-count method (not collaboratively validated)	NMKL 5 Aerobic microorganisms and presumptive <i>Enterobacteriaceae</i> . Enumeration on surfaces and utensils. (collaboratively validated)	NO Different principle. NMKL: swab + contact plate ISO: colony count
Aerobic microbes	ISO 4833 Horizontal methods for the enumeration of microorganisms. Colony-count technique at 30 °C. (collaboratively validated on raw and pasteurized milk)	NMKL 86 Aerobic microorganisms. Determination in foods at 30°C, 20°C or 6.5°C. (not collaboratively validated)	YES
<i>Enterobacteriaceae</i>	ISO 21528-2 Horizontal methods for the detection and enumeration of <i>Enterobacteriaceae</i> - Part 2: Colony-count method (not collaboratively validated)	NMKL 144 <i>Enterobacteriaceae</i> . Determination in foods and feeds. (collaboratively validated)	YES
<i>Stafylococcus aureus</i>	ISO 6888-1 + 2 Horizontal method for the enumeration of coagulase-positive staphylococci (<i>Stafylococcus aureus</i> and other species) Part 1: Technique using Baird-Parker agar Part 2: Technique using rabbit plasma fibrinogen agar medium (collaboratively validated)	NMKL 66 <i>Stafylococcus aureus</i> . Enumeration in foods. (collaboratively validated)	YES
<i>E.coli</i> O 157	EN/ISO 16654 Horizontal method for the detection of <i>Escherichia coli</i> O157 (not collaboratively validated)	NMKL 164 <i>Escherichia coli</i> O157. Detection in foods and feed stuffs. (collaboratively validated)	YES
<i>Campylobacter</i>	EN/ISO 10272-1 Horizontal method for detection and enumeration of <i>Campylobacter</i> spp. -- Part 1: Detection method (not collaboratively validated)	NMKL 119 (rev) Thermotolerant <i>Campylobacter</i> . Detection and enumeration in foods (collaboratively validated)	YES
<i>Salmonella</i> in faeces	EN/ISO 6579/Amd.1 MSRV method <i>Salmonella</i> in faeces. (under collaborative study)	NMKL XX <i>Salmonella</i> . Detection in foods, faeces and materials from primary animal production using MSRV. (not collaboratively validated)	YES
<i>Yersinia enterocolitica</i>	EN/ISO 10273 Horizontal method for the detection of presumptive pathogenic <i>Yersinia enterocolitica</i> . (not collaboratively validated)	NMKL 117 (rev) <i>Yersinia enterocolitica</i> . Detection in foods. (collaboratively validated but the method is not published as the results were not satisfactory)	YES

PAH - REQUEST FOR PARTICIPANTS IN COLLABORATIVE TRIAL

Søren Wretling, National Food Administration of Sweden, has elaborated a method draft on the determination of PAH (polycyclic aromatic hydrocarbon) using GCMS. The draft is now approved by the NMKL national committees for a collaborative study, and there is a need for collaborators.

The method is applicable for meat, fish and oils. The sample is hydrolysed with potassium hydroxide in methanol/water, extracted with cyclohexane, washed with methanol/water, cleaned up on SPE columns and quantified by GCMS analysis in SIM-mode with impact ionisation. Internal standards are used for quantification.

NMKL would like to invite laboratories to participate in the collaborative study. If you are able to take part, please contact Søren Wretling, (e-mail: sowr@slv.se) or Haakan Johnsson (e-mail: hajo@slv.se) at the National Food Administration, Uppsala, Sweden.

New NMKL Procedure No. 19, 2007

GUIDELINES FOR SENSORIAL ANALYSIS OF FOOD PACKAGING MATERIALS

The guidelines given in this NMKL procedure are based on national as well as international recommendations and standards. Furthermore, it is based on many years' experience in the field. The procedure describes different ways to perform sensorial analysis on packages intended for foodstuffs, and calls attention to critical aspects and pitfalls of the work. The procedure concentrates on sensorial aspects regarding packaged foodstuffs with a main focus on smell and taste classifications, and does not deal with such issues as design and practical handling of the packages. The applicability of this procedure is wide as it includes different topics such as routine production control of the incoming material, assessment of the storage of packaged food and inspection in order to check compliance with applicable regulations.



This NMKL procedure is evaluated by a project group with the following members:

Gunnar Forsgren, Iggesund Paperboard AB (project leader), Sweden

Grethe Hyldig, Danish Institute for Fisheries Research

Ása Þorkelsdóttir och Emilía Martindóttir, Rannsóknastofnun fiskiðnaðarins, Iceland

Liv Bente U Strandos, Elopak AS, Norway

Raija-Liisa Heiniö, VTT, Technical Research Centre of Finland.

Lars Kristoffersson, Tetra Pak Research & Development AB, Sweden

In addition, the sensory committee of NMKL (subcommittee 4) has been involved in the project.



The procedure is available from the NMKL secretariat. At present, the procedure is available in Swedish only, but it will be translated into English.

NORDIC COURSES IN SENSORIAL EVALUATION OF DRINKING WATER

In 2007, NMKL is planning, in cooperation with the Norwegian Institute for Food and Environmental Analysis (Norsk Matanalyse), to arrange courses in sensory evaluation of drinking in all of the Nordic countries. The courses will most likely be held in the Autumn.



(photo from
Norsk Matanalyse)

The courses will be based on

- NMKL Method No. 183, 2005: **Sensory quality control test for drinking water** and
- NMKL Procedure No. 11, 2002: **Procedure for sensory analysis of drinking water / Juomaveden aistinvarainen arviointi**

The course will be practical. A project group within NMKL is appointed to arrange the courses. Steffen Solem, Norsk Matanalyse, is the project leader, and Leena Lilleberg, Evira, will be the expert responsible for the courses in Finland, which will be held in Finnish.

Look for information on the NMKL web pages and in the next issue of the NMKL Newsletter. Registration may be made to the office of the NMKL Secretary General.

AMENDMENTS TO NMKL METHODS

It is becoming increasingly important to collaboratively validate methods and include the results from the study in the method text. This is due to the criteria approach in the EU and Codex, where the method characteristics should be considered when endorsing methods for their purposes (i.e. for chemical methods), and also because laboratories are more quality assurance minded, and thus request that the results be included.

Some methods published in 1997 did not include the results of their respective collaborative studies, only a discussion thereof. The subscribers of NMKL methods are therefore receiving amendments to the following NMKL methods:

- **NMKL 122, 1997:** Saccharin. Liquid chromatographic determination in beverages and sweets
- **NMKL 124, 1997:** Benzoic acid, sorbic acid and p-hydroxybenzoic acid esters. Liquid chromatographic determination in foods
- **NMKL 145, 1997:** Starch and glucose. Enzymatic determination in foods
- **NMKL 157, 1997:** Carmine. Liquid chromatographic determination in foods

The amendments include the results and evaluation of the collaborative studies.

METHODS IN PROGRESS

A number of methods and study reports are now approved for publishing by the NMKL national committees, some methods /study reports with comments. More time is needed for making editorial changes before finalising, but we are determined to make them available before the summer. The following NMKL methods are in the final stage of production, and are certainly worth waiting for:

- No. 119: **Thermotolerant *Campylobacter***. Detection and enumeration in foods and drinking water.
- No. 136: ***Listeria monocytogenes***. Detection in foods and feed stuffs and enumeration in foods.
- No. 140: **Lactic acid bacteria**. Determination in meat and meat products.
- No. XX: ***Salmonella***. Detection in foods, faeces and materials from primary animal production using MSRV.
- No. XX: **Acrylamide**. Determination in food by liquid chromatography tandem mass spectrometry.
- No. XX **Trace elements**. Determinations of As, Cd, Hg and Pb and other elements in foods by ICP-MS after pressure digestion.

NMKLS PRICES FOR 2007:

- Online subscription, a complete method collection with continuous updates, for existing subscribers: NOK 3 000 for 1-3 users.
- New subscription for online method collection: NOK 5 000
- Annual hard copy subscription: NOK 2 000
- Annual electronic subscription via e-mail: NOK 1 500
- Single NMKL Methods: NOK 400
- Single NMKL Procedures (guidelines): NOK 300

AVAILABLE NMKL PROCEDURES

- No. 1, 2nd Ed. 2005** Calibration and performance checking of laboratory balances. Available in Swedish and English.
- No. 2, 1995** Performance check and in-house calibration of thermometers. Available in Swedish and English..
- No. 3, 1996** Control charts and control materials in internal quality control in food chemical laboratories. Available in Swedish and English.
- No. 4, 2nd Ed. 2005** Validation of chemical analytical methods. Available in Norwegian and English (Spanish edition from 1996 as PDF-file).
- No. 5, 2nd Ed. 2003** Estimation and expression of measurement uncertainty in chemical analysis. Available in Swedish, English and Spanish (Spanish only as PDF-file).
- No. 6, 1998** Yleiset ohjeet aistinvaraisten laboratorioden laadunvarmistukseen. Available in Danish and Finnish - Erratum 2002 (Danish).
- No. 7, 1998** Checking of UV/VIS spectrophotometers. Available in Danish and English.
- No. 8, 2nd Ed. 2002** Measurement uncertainty in microbiological examination of foods. Available in Norwegian and English.
- No. 9, 2001** Evaluation of results derived from the analysis of certified reference materials. Available in Swedish and English.
- No. 10, 2001** Control of Microbiological Media. Available in Norwegian, Finnish and English.
- No. 11, 2002** Procedure for sensory analysis of drinking water/Juomaveden aistinvarainen arviointi. Available in Norwegian, Finnish and English.
- No 12, 2002** Guide on sampling for analysis of foods. Available in Norwegian, Finnish, English and Polish.
- No. 13, 2003** Volumetric control. Available in Danish and English.
- No. 14, 2004** SENSVAL: Guidelines for internal control in sensory analysis laboratories. Available in Norwegian and English.
- No. 15, 2004** Temperature control in microbiological laboratories. Available in Swedish and English.
- No. 16, 2005** Sensory quality control. Available in Norwegian and English.
- No. 17, 2006** Guidelines for requirement specifications for food analyses. Available in Norwegian and English.
- No. 18, 2006** The use of reference materials, reference strains and control charts in a food microbiological laboratory. Available in Norwegian and English.
- No. 19, 2007** Guideline for sensorial Analysis of Food Packaging Materials. Currently available in Swedish, but will be translated into English.