List of conferences

Monday June 7

LIVE PROGRAM

7:45 am (EDT)
Welcoming Remark
Gilles Froment, Senior Vice-President, Government & Industry Relations, Lactalis Canada
Sylvie Turgeon, Ph.D., professeure titulaire, Université Laval Chercheur du Centre de recherche STELA (INAF)

Welcome by IDF President
Piercristiano Brazzale, President, FIL-IDF, International Dairy Federation

Session A
Microbial ecology: Starters, adjunct and indigenous microbiota

8:10 am
KEYNOTE

Analysis of cheese microbiomes highlights contributions to multiple aspects of quality
Prof Paul Cotter, PhD., Head of Food Biosciences, Teagasc Food Research Centre Moorepark, Cork, Ireland

8:40 am
CONFERENCES

Matching starter phenotype to functionality for low salt Cheddar cheese production based on viability, permeability, autolysis and enzyme release characteristics in model systems.
Martin Wilkinson¹, Yanachkina Palina¹, Doolan Imelda¹, Gisele LaPointe²

¹ University of Limerick Ireland, ² University of Guelph Canada
Bacteriophages on the cheese surface: what diversity and what ecological role?
Eric Dugat-Bony¹, Thomas Paillet¹, Julien Lossouarn², Marie-Agnès Petit², Stéphane Chaillou²

¹ Université Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, F-78850, Thiverval-Grignon, France, ² Université Paris-Saclay, INRAE, AgroParisTech, Micalis Institute, F-78352, Jouy-en-Josas, France

9:15 am
Q&A SESSION

9:35 am
STUDENT COMPETITION

Thomas Paillet France Isolation and characterization of phage-host couples from Epoisses cheese rind

Zheng Zhao Canada Antifungal lactic acid bacteria for use in dairy fermentations

Hatice Ebrar Kirtil Turkey Filamentous fungi of Turkish mold-ripened cheeses and genetic characteristics of Penicillium roqueforti strains

Marie-Pier B. Vigneux Canada Impact of adding sodium caseinate on rennet-induced coagulation of reverse osmosis milk concentrates

Bozhao Li Ireland Suitability of a novel camel (Camelus dromedarius) chymosin as a coagulant for Cheddar cheese

Imène Ferroukhi FRANCE Investigating alternative salting methods to reduce the salt content in blue-veined cheese
LIVE PROGRAM

Session B
Ripening, flavor and cheese authenticity

10:35 am
KEYNOTE

Chemical characterisation of cheese varieties

Ylva Margareta Ardö, PhD., Professor emerita in dairy technology, Department of Food Science, University of Copenhagen, Denmark

11:15 am
CONFERENCES

Effect of plasmin on casein hydrolysis and textural properties of a model cheese during ripening

Huifang Cai¹, Etske Bijl², Elke Scholten¹, Guido Sala¹
¹ Physics and Physical Chemistry of Foods, Wageningen University, the Netherlands, ² Dairy Science and Technology Group, Food Quality and Design, Wageningen University, the Netherlands

Is it possible to differ Grana Padano PDO cheese from generical hard cheeses through DNA metabarcording and DNA metafingerprinting of the cheese microbiota?

Miriam Zago¹, Tommaso Bardelli², Lia Rossetti¹, Nelson Nazzicari¹, Barbara Bonvini¹, Flavio Tidona¹, Domenico Carminati¹, Giorgio Giraffa¹
¹ CREA - Research Centre for Animal Production and Aquaculture, ² CREA - Research Centre for Plant Protection and Certification

11:45 am
Q&A SESSION
Wednesday June 9

LIVE PROGRAM

7:45 am (EDT)
Word of the agricultural minister of Canada
Ms. minister Marie-Claude Bibeau

Session C
Cheese Technology: Process eco-efficiency and innovative approaches

8:00 am
KEYNOTE

An overview on new designer cheeses: from specialized starters to personalized cheeses
Valérie Gagnaire, PhD., and Gwénaël Jan, PhD., senior researchers based at INRAE, Science et Technologie du Lait et de l’Œuf, at Rennes in France.

8:30 am
CONFERENCES

Rennet-induced coagulation of milk: new insights into age-old problems
Thom Huppertz¹
¹ FrieslandCampina

Extending the performance shelf-life of LMPS Mozzarella cheese using high stretching temperatures in a novel waterless cooker
Erin Aversa¹, Selvarani Govindasamy-Lucey², Mark Johnson², John Jaeggi², John Lucey²
¹ University of Wisconsin-Madison, ² Center for Dairy Research, University of Wisconsin-Madison

9:05 am
Q&A SESSION
9:30 am

STUDENT COMPETITION

Hasitha Priyashantha Sweden NIR-hyperspectral imaging enables rapid and non-destructive characterization of long-ripening cheeses based on maturity

Beate Bjørgan Effect of scalding temperature on sensory and biochemical properties in a “Manchego-type” goat milk cheese.

Shamim Hossain India Casein Content: A better quality index for Cheddar cheese than its age for selecting the optimum blend for processed cheese

Ran Feng Denmark Residence time in the cooker-stretcher influences mozzarella cheese composition and structure

Anne Katrine Laursen Danmark Modification of texture and microstructure in cow and buffalo milk paneer, by thermal treatment and milk fat content

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LIVE PROGRAM

10:30 am

Word of the FIL-IDF Canada President
Catherine Tokarz, president, FIL-IDF Canada

Welcome by IDF Director General
Caroline Emond, director general, International Dairy Federation

10:50 am

Session C - Continued
Cheese Technology: Process eco-efficiency and innovative approaches

3D printing for cheese: evaluation as process technology and consumer product
Megan M. Ross¹, Shane V. Crowley¹, Mary B. McCarthy¹, Alan P. Morrison¹, Alan M. Collins¹, Jorge Oliveira¹, Suzanne Crotty¹, Alan L. Kelly¹
¹ University College Cork
Eye formation in experimental Swiss-type cheeses ripened in plastic films with varying CO2-permeability

Walter Bisig¹, Dominik Guggisberg¹, Marie-Therese Fröhlich-Wyder¹, Daniel Wechsler¹

¹ Agroscope

11:25 am
Q&A SESSION
Friday June 11

LIVE PROGRAM

7:45 am (EDT)
Word of the agricultural minister of Québec
Mr. minister André Lamontagne

Session D
Cheese structure and rheology

8:00 am
KEYNOTE
Using rheology to understand the melting behaviour of cheese

Professor John A. Lucey, Ph. D., Director of the Center for Dairy Research, University of Wisconsin-Madison, USA

8:25 am
CONFERENCES

Exopolysaccharides from Lactococcus lactis for tailoring cream cheese texture

Georg Surber¹, Thomas Spiegel²,³, Bich Phuong Dang², Alan Wolfschoon Pombo²,⁴, Harald Rohm¹, Doris Jaros¹

¹ Chair of Food Engineering, Technische Universität Dresden, 01062 Dresden, Germany, ² Kraft Foods R&D Inc./Mondelēz International, Inselkammerstr. 12–14, Unterhaching, 82008 Munich, Germany, ³ Present Address: Hochland SE, Kemptener Str. 17, 88178 Heimenkirch, Germany, ⁴ Present Address: Fliederstrasse 20, 85354 Freising, Germany

Modelling diffusion of salt in model cheese matrices using time-lapse confocal laser scanning microscopy

Prateek Sharma¹,², JJ Sheehan¹, Juliane Floury³

¹ Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland , ² NDFS Department, Utah State University, Logan, UT-84341, USA, ³ STLO, INRA, AGROCAMPUS OUEST, 35042, Rennes, France
9:05 am
Q&A SESSION

9:35 am
STUDENT COMPETITION

Rock-Seth AGOUA Canada High Voltage Electrical Treatments can substantially improve the biofunctional value of whey

Adam Cogan Ireland The Effect of Heating of Cheddar Cheese on In-Vitro Digestion Characteristics, Calcium Functionality and Fat Structure-Function Relationships in Comparison to Unheated Cheese.

Rami Althnaibat Canada Glycomacropeptide Purified from Camel Milk Cheese Whey Inhibits the Adhesion of Enterotoxigenic Escherichia coli K88

Mathilde Pimont-Farge Canada Hydrogel formation of the self-assembling β-lactoglobulin peptide Pf1-8: Influence of the purification steps

Léa Guinot Canada Impact of dairy matrices in a standardized meal on the lipid digestion using in vitro static and dynamic digestion models

Hao Ouyang Ireland Understanding preferences for, and consumer behaviour towards, cheese among young, educated, internationally mobile Chinese consumers

LIVE PROGRAM

Session E
Innovation, functionality, nutrition and health

10:40 am
KEYNOTE
Dairy consumption and metabolic health: a focus on cheese
Eileen Gibney, PhD., University College Dublin, School of Agriculture and Food Science, Ireland
11:05 am
CONFERENCES

Introduction of advanced nanotechnologies in sensing systems for enhancing authenticity and quality in the dairy value chain: the case study of the EU H2020 MOLOKO project

Paolo Bulgarelli¹, Jeroen Peters², Mark Whatton³, Stefano Toffanin⁴

¹ Parmalat S.p.A, Italy, ² WFSR, Wageningen University & Research, Netherlands, ³ QUADRACHEM LABORATORIES LIMITED, United Kingdom, ⁴ CNR-ISMN, Italy

Health benefits of cream cheese enriched with milk polar lipids: focus on lipid metabolism, shingolipidome and associated cardiovascular risk markers

Cécile Vors¹, Mélanie Le Barz¹, David Cheillan¹, Annick Bernalier-Donadille², Patrice Gaborit³, Nadine Leconte⁴, Stéphanie Lambert-Porcheron⁵, Corinne Malpuech-Brugère⁶, Marie-Caroline Michalski¹

¹ Univ Lyon, CarMeN laboratory, INSERM, INRAE, INSA Lyon, Université Claude Bernard Lyon 1, ² Université Clermont Auvergne, INRA, UMR 454, MEDIS, ³ ACTALIA Dairy Products and Technologies, ENILIA ENSMIC, ⁴ INRAE, Institut Agro, STLO (Science et Technologie du Lait et de l’Œuf), ⁵ Centre de Recherche en Nutrition Humaine Rhône-Alpes, Hospices Civils de Lyon, ⁶ Université Clermont Auvergne, INRAE, UNH, Unité de Nutrition Humaine, CRNH Auvergne

11:30 am
Q&A SESSION
Session A - Microbial ecology: Starters, adjunct and indigenous microbiota

Formation of biogenic amines in raclette-type cheese by Morganella morganii.

Lorenz Timo Ryser\textsuperscript{1,2}, Emmanuelle Arias-Roth\textsuperscript{1}, Hélène Berthoud\textsuperscript{1}, Céline Delbès\textsuperscript{3}, Christophe Chassard\textsuperscript{3}, Rémy Bruggmann\textsuperscript{2}, Stefan Irmler\textsuperscript{1}

\textsuperscript{1}Agroscope, Schwarzenburgstrasse 161, 3003 Bern, Switzerland, \textsuperscript{2}University of Bern, Interfaculty Bioinformatics Unit, Baltzerstrasse 6, 3012 Bern, Switzerland, \textsuperscript{3}Université Clermont Auvergne, INRAE, VetAgro Sup, Unité Mixte de Recherche sur le Fromage, 20 côte de Reyne, 15000 Aurillac, France

Session B - Ripening, flavor and cheese authenticity

Metabolic fingerprint of a complex food, cheese: development of extractions, uHPLC-HRMS analysis and data processing by W4M.

Sandra Teresita Martín del Campo\textsuperscript{1}, Pascale Lieben\textsuperscript{2}, Daniel Picque\textsuperscript{2}, Sophie Landaud\textsuperscript{2}

\textsuperscript{1}Tecnologico de Monterrey, \textsuperscript{2}UniversitéParis-Saclay, INRAE, AgroParisTech, UMR SayFood

Malt flavour in Swiss Raclette cheese.

Hélène Meng\textsuperscript{1}, Miguel Piccand\textsuperscript{1}, Alexandra Baumeyer\textsuperscript{1}, Mireille Tena Stern\textsuperscript{1}, Sébastien Dubois\textsuperscript{1}, Ueli von Ah\textsuperscript{1}, Pascal Fuchsmann\textsuperscript{1}

\textsuperscript{1}Agroscope
Stability and functional redundancy of a microbial cheese ecosystem subjected to a perturbation: presentation of several case studies.

Dominique Swennen¹, Gersende Gonez², Stevenn Volant², Eric Dugat-Bony¹, Sandra Helinck¹, Marie-Agnès Dillies³, Pascal Bonnarme¹

¹Université Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, F-78850, Thiverval-Grignon, France, ²Institut Pasteur, Hub de Bioinformatique et Biostatistique – Département Biologie Computationnelle - F-75015 Paris, France

Session C - Cheese Technology: Process eco-efficiency and innovative approaches

Accelerating the migration of norbixin molecules through rennet-induced micellar casein concentrate (MCC) gels by application of an electrical field.

Ali Alehosseini¹, Prateek Sharma¹ ², Alan L. Kelly³, Jeremiah J. Sheehan¹

¹Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland P61 C996, ²Department of Nutrition, Dietetics, and Food Sciences, Utah State University, 8700 Old Main Hill, Logan, UT-84322-8700, USA, ³School of Food and Nutritional Sciences, University College Cork, Ireland

Applying an external electrical field to overcome calcium-induced resistance to colorant migration in model cheese matrices.

Ali Alehosseini¹, Prateek Sharma¹ ², Alan L. Kelly³, Jeremiah J. Sheehan¹

¹Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland P61 C996, ²Department of Nutrition, Dietetics, and Food Sciences, Utah State University, 8700 Old Main Hill, Logan, UT-84322-8700, USA, ³School of Food and Nutritional Sciences, University College Cork, Ireland

Opportunities to improve eco-efficiency in cheesemaking by the use of pressure-driven membrane separation processes.

Julien Chamberland¹, Scott Benoit¹, Alain Doyen¹, Manuele Margni², Michel Britten³, Yves Pouliot¹

¹Institute of Nutrition and Functional Foods (INAF), Dairy Research Center (STELA), Food Science Department, Université Laval, Québec, QC, Canada, ²CIRAIG, Polytechnique Montréal, Department of Mathematical and Industrial Engineering, Montréal, QC, H3C 3A7, Canada, ³Agriculture and Agri-Food Canada, St-Hyacinthe Research and development Center (SHRDC), St-Hyacinthe, QC, Canada
Use of Lactose Standardization and Extrusion Technology for Manufacture of Colby Cheese.
Hong Jiang1, S. Govindasamy-Lucey1, J. Jaeggi1, M. Johnson1, J. A. Lucey1, 2
1Center for Dairy Research, 2University of Wisconsin-Madison

Insights into the occurrence of non-coagulating milk using genomic and proteomic approaches.
Frida Lewerentz1, Marie Paulsson1, Maria Glantz1
1Department of Food Technology, Engineering and Nutrition, Lund University

Application of Laser Induced Breakdown Spectroscopy technique for spatial distribution of salt in cheese matrices.
Prateek Sharma1, 2, P Casado-Gavalda Maria3, JJ Sheehan1, Carl Sullivan3
1Teagasc Food Research Centre, Moorepark, Ireland, 2Utah State University, Logan, UT-84341, USA, 3School of Food Science and Environmental Health, Technical University Dublin, Ireland

Influence of different genetic polymorphisms of αs1- and κ-Casein on Havarti type cheese: Effects on cheese making, yield, ripening, and sensory quality.
Siv Skeie1, Isaya Ketto1, Martine Andrea Olsen1, Øyaas Jorun2, Kristine Myrer3
1Faculty of Chemistry, Biotechnology and Food Science (KBM), Norwegian University of Life Sciences, 2TINE SA, 3Nofima

Employment of recombined milk to produce Crescenza, an Italian soft cheese.
Flavio Tidona1, Marcello Alinovi2, Francesco Locci1, Roberta Ghigletti1, Salvatore Francolino1, Gianluca Brusa1, Lucia Monti2, Giorgio Giraffa1
1Councicouncil for agricultural research and economics, 2University of Parma

The effect of cold atmospheric plasma application on the microbiological properties and free fatty acid profile of Turkish White cheese.
Nazli Turkmen1, Farah Gonul Aydin3, Bahar Onaran Acar3
1Ankara University Faculty of Agriculture Department of Dairy Technology, 2Ankara University Faculty of Veterinary Medicine Department of Pharmacology and Toxicology, 3Ankara University Faculty of Veterinary Medicine Department of Food Hygiene and Technology
Effect of thermal treatment on cheese milk with serum protein depleted content: an evaluation of rennet coaguability, cheese composition and yield.

Xiaofeng Xia\textsuperscript{1, 2}, John Tobin\textsuperscript{1}, Surabhi Subhir\textsuperscript{1}, Mark Fenelon\textsuperscript{1}, Paul McSweeney\textsuperscript{2}, Diarmuid Sheehan\textsuperscript{1}

\textsuperscript{1}Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland, \textsuperscript{2}School of Food and Nutritional Sciences, University College Cork, Ireland

Session D - Cheese structure and rheology

Evaluation of cheese milk pre-acidification and delayed cooling to reduce moisture migration and textural differences in 291-kg blocks of Cheddar cheese.

Claire Collins\textsuperscript{1}, Mark Johnson\textsuperscript{2}, Selvarani Govindasamy-Lucey\textsuperscript{2}, John Jaeggi\textsuperscript{2}, John Lucey\textsuperscript{1, 2}

\textsuperscript{1}University of Wisconsin-Madison, \textsuperscript{2}Center for Dairy Research

Predicting shredding performance of process cheese using wear behavior and material properties.

Prateek Sharma\textsuperscript{1}, Jason D Young\textsuperscript{1}, Donald J McMahon\textsuperscript{1}

\textsuperscript{1}Department of Nutrition, Dietetics, and Food Sciences, Utah State University, 8700 Old Main Hill, Logan, UT, 84322-8700, USA

Wear behavior, microstructure and shredding performance of process cheese as influenced by age of the cheese and Tri-sodium citrate (TSC) content.

Prateek Sharma\textsuperscript{1}, Jason D Young\textsuperscript{1}, Almut H. Vollmer\textsuperscript{1}, Donald J McMahon\textsuperscript{1}

\textsuperscript{1}Department of Nutrition, Dietetics, and Food Sciences, Utah State University, 8700 Old Main Hill, Logan, UT, 84322-8700, USA

Session E - Innovation, functionality, nutrition and health

Lactobacillus plantarum WCFS1: delivering an effective probiotic strain using dairy food matrices.

Émilie Desfossés-Foucault\textsuperscript{1}, Monica Daga\textsuperscript{1}, Gulshan Arora\textsuperscript{1}

\textsuperscript{1}Biena Inc.
**Session A - Microbial ecology: Starters, adjunct and indigenous microbiota**

**Isolation and characterization of phage-host couples from Epoisses cheese rind**

*Thomas Paillet*¹, *Julien Lossouarn* ², *Marie-Agnès Petit*², *Eric Dugat-Bony*¹

¹Université Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, F-78850, Thiverval-Grignon, France, ²Université Paris-Saclay, INRAE, AgroParisTech, Micalis Institute, F-78352, Jouy-en-Josas, France

**Antifungal lactic acid bacteria for use in dairy fermentations**

*Zheng Zhao*¹, *Nuanyi Liang*¹, *Jonathan Curtis*¹, *Michael Gänzle*¹

¹University of Alberta

**Filamentous fungi of Turkish mold-ripened cheeses and genetic characteristics of Penicillium roqueforti strains**

*Hatice Ebrar Kirtili*¹, *Muhammet Arici*², *Banu Metin*¹

¹Department of Food Engineering, Faculty of Engineering and Natural Sciences, Istanbul Sabahattin Zaim University, Istanbul, Turkey, ²Department of Food Engineering, Faculty of Chemical and Metallurgical Engineering, Yildiz Technical University, Istanbul, Turkey

**Identification of Penicillium spp. in Turkish mold-ripened cheeses by FT-IR spectroscopy**

*Hatice Ebrar Kirtili*¹, *Nur Cebi*², *Rusen Metin Yildirim*², *Banu Metin*¹, *Muhammet Arici*²

¹Department of Food Engineering, Faculty of Engineering and Natural Sciences, Istanbul Sabahattin Zaim University, Istanbul, Turkey, ²Department of Food Engineering, Faculty of Chemical and Metallurgical Engineering, Yildiz Technical University, Istanbul, Turkey
Exploring viable community composition of Cheddar cheese using propidium monoazide (PMA)
Zoha Barzideh\textsuperscript{1}, Gisèle LaPointe\textsuperscript{1}
\textsuperscript{1}Canadian Research institute for Food Safety, Department of Food Science, University of Guelph, Canada

The interplay between farming system and raw milk quality: development of new payment parameters of milk in the Parmigiano Reggiano cheese area
Luca Bettera\textsuperscript{1}, Elena Bancelari\textsuperscript{1}, Saverio Monica\textsuperscript{1}, Monica Gatti\textsuperscript{1}, Benedetta Bottari\textsuperscript{1}
\textsuperscript{1}University of Parma

Positive interactions between lactic acid bacteria promoted by nitrogen-based nutritional dependencies
Fanny Canon\textsuperscript{1}, Marie-Bernadette Maillard\textsuperscript{1}, Gwénaëlle Henry\textsuperscript{1}, Anne Thierry\textsuperscript{1}, Valérie Gagnaire\textsuperscript{1}
\textsuperscript{1}UMR STLO, INRAE, Institut Agro, F35000, Rennes, France

Development of a high-throughput qPCR system for the quantitative investigation of bacterial communities in cheese
Matthias Dreier\textsuperscript{1, 2}, Hélène Berthoud\textsuperscript{1}, Noam Shani\textsuperscript{1}, Daniel Wechsler\textsuperscript{1}, Pilar Junier\textsuperscript{2}
\textsuperscript{1}Agroscope, Schwarzenburgstrasse 161, CH-3003 Bern, Switzerland, \textsuperscript{2}University of Neuchâtel, Rue Emile-Argand 11, CH-2000 Neuchâtel, Switzerland

Ability of thermoresistant Enterococcus faecalis to form dairy biofilms
Mérilie Gagnon\textsuperscript{1, 2}, Coralie Goetz\textsuperscript{1, 2}, Julie Jean\textsuperscript{1, 2}, Denis Roy\textsuperscript{1, 2}
\textsuperscript{1}Université Laval, \textsuperscript{2}Op+Lait

Application of the Omnilog system in efficient characterization of strains for cheese starter cultures
Molly Moritz\textsuperscript{1}
\textsuperscript{1}IFF

Influence of pH and temperature on the formation of biogenic amines and CO2 using two lactobacilli strains on a Cheddar cheese model system
Irwin Panguripan\textsuperscript{1}, Kristen Houck\textsuperscript{2}, Rodrigo A. Ibáñez\textsuperscript{2}, Selvarani Govindasamy-Lucey\textsuperscript{2}, Mark E. Johnson\textsuperscript{2}, John A. Lucey\textsuperscript{1, 2}
\textsuperscript{1}Department of Food Science, University of Wisconsin-Madison. Madison, WI 53706, United States, \textsuperscript{2}Center for Dairy Research, University of Wisconsin-Madison. Madison, WI 53706, United States
High-throughput sequencing for characterization of microbial shifts throughout production and ripening of Idiazabal (ewe’s raw milk) cheese

Gorka Santamarina-García¹, Igor Hernández¹, Gustavo Amores¹, Mailo Virto¹

¹Lactiker Research Group, Department of Biochemistry and Molecular Biology, Faculty of Pharmacy, University of the Basque Country UPV/EHU, Paseo de la Universidad 7, 01006 Vitoria-Gasteiz, Spain

Characterizing Bacterial Diversity in Undefined Dairy Starter Cultures

M Siddiqi¹, G LaPointe¹

¹Univeristy of Guelph

Influence of modified “cold” storage on the bacterial composition of raw milk for Provolone Valpadana PDO cheese

Miriam Zago¹, Barbara Bonvini¹, Lia Rossetti¹, Giorgia Fergonzi¹, Flavio Tidona¹, Giorgio Giraffa¹, Domenico Carminati¹

¹Research Centre for Animal Production and Aquaculture (CREA-ZA)

Session B - Ripening, flavor and cheese authenticity

Oxygen concentration influences the profiles of volatile compounds produced by different lactic acid bacteria in a curd-based medium

Solange Buchin¹, Romain Palme¹, Celine Arnould¹, Franck Dufrene¹, Sabrina Jeannin¹, Eric Beuvier¹

¹INRAE, URTAL, Poligny, France

Changes in the quality of pressed cheese produced with raw milk in response to different n-3 fatty acid supplements in the diet of dairy sheep

Delgado D.¹, Fernández D.¹, Gallardo B.², Lavín P.³, Mantecón A.R.³ and Manso T.²

¹Estación Tecnológica de la Leche, ITACYL, Junta de Castilla y León, Palencia, Spain itadelfueada@itacyl.es

²Área de Producción Animal. ETS de Ingenierías Agrarias. Universidad de Valladolid. 34004 Palencia, Spain.

³Instituto de Ganadería de Montaña (CSIC-ULE). 24346 Grulleros, León, Spain.
Impact of fat content on eye formation in cheese

Marie-Therese Fröhlich-Wyder, Walter Bisig, Dominik Guggisberg, Daniel Wechsler, Ernst Jakob

1Agroscope, Bern, Switzerland

Identification of key odorants in smear-ripened semi-hard cheese

Valérie Gagnaire, Marie-Bernadette Maillard, Sébastien Lê, Anne Thierry

1INRAE, 2Institut Agro

New solutions for Cheddar & semi-hard cheese “flavor signature” through starter bio-diversity

Jonathan Goodwins, Aude Gauchard, Loic Pellerin, Anne-Sophie Lecorps

1IFF

Reduction in the Brining Time in Parmigiano Reggiano Cheese Production Minimally Affects Proteolysis, with No Effect on Sensory Properties

Cecilia Loffi, Tullia Tedeschi, Stefano Sforza, Gianni Galaverna, Elena Bortolazzo, Anna Garavaldi, Valeria Musi, Paolo Reverberi

1University of Parma - SITEIA.PARMA, Parma, Italy, 2University of Parma, Food and Drug Science Department, Parma, Italy, 3CRPA Lab, Reggio Emilia, Italy, 4Parmigiano Reggiano Cheese Consortium, Reggio Emilia, Italy

Changes in the lipolysis process during an extended ripening of a Mexican goat surface cheese

Rosa Vázquez-García, Sandra Teresita Martín-del-Campo, Livia Sofia Ramos-Hernández

1Tecnologico de Monterrey

Formation of biogenic amines by Lactobacillus wasatchensis in experimental Swiss-type cheeses and related opening defects

Daniel Wechsler, Hélène Berthoud, Stefan Irmler, Matthias Dreier, Noam Shani, Dominik Guggisberg, Reto Portmann, René Badertscher, Florian Loosli

1Agroscope
Influence of the contamination level of Lactobacillus parabuchneri in vat milk and of the cheese making conditions on histamine formation during ripening.

Daniel Wechsler\textsuperscript{1}, Hélène Berthoud\textsuperscript{1}, Stefan Irmler\textsuperscript{1}, Reto Portmann\textsuperscript{1}, René Badertscher\textsuperscript{1}, Walter Bisig\textsuperscript{1}, Marie-Therese Fröhlich-Wyder\textsuperscript{1}

\textsuperscript{1}Agroscope Switzerland

Session C - Cheese Technology: Process eco-efficiency and innovative approaches

Investigating alternative salting methods to reduce the salt content in blue-veined cheese

Imene Ferroukhi\textsuperscript{1}, Cecile Bord\textsuperscript{1}, Sylvie Alvarez\textsuperscript{2}, Karine Fayolle\textsuperscript{1}, Rene Lavigne\textsuperscript{3}, Christophe Chassard\textsuperscript{4}, Julie Mardon\textsuperscript{1}

\textsuperscript{1}Université Clermont Auvergne, INRAE, VetAgro Sup, UMR 545 Fromage, Lempdes, F-63370, France, \textsuperscript{2}Département qualité et économie alimentaire, VetAgro Sup, Lempdes, F-63370, FRANCE, \textsuperscript{3}Université Clermont Auvergne, INRAE, VetAgro Sup, UMR 545 Fromage, 20 Côte de Reyne, Aurillac, F-15000, France

Effect of scalding temperature on sensory and biochemical properties in a “Manchego-type” goat milk cheese.

Beate Bjørgan\textsuperscript{1}, Siv Skeie\textsuperscript{1}, Anne-Gerthe Johansen\textsuperscript{1,2}, Paula Varela Tomasco\textsuperscript{1,3}

\textsuperscript{1}NMBU, \textsuperscript{2}TINE SA, \textsuperscript{3}Nofima

Intact Casein Content: A better quality index for Cheddar cheese than its age for selecting the optimum blend for processed cheese

Shamim Hossain\textsuperscript{1}, Dushyant Chaudhary\textsuperscript{1}, Yogesh Khetra\textsuperscript{2}, Suress C.T.\textsuperscript{1}, Sangita Ganguly\textsuperscript{2}

\textsuperscript{1}Research Scholar, Dairy Technology, ICAR-National Dairy Research Institute, Karnal, Haryana (132001) India, \textsuperscript{2}Scientist, Dairy Technology, ICAR-National Dairy Research Institute, Karnal, Haryana (132001) India

Dairy white wastewater recovery: study of the potential reuse in cheese production

Sabine Alalam\textsuperscript{1}, Amélie Bérubé\textsuperscript{1}, Julien Chamberland\textsuperscript{1}, Yves Pouliot\textsuperscript{1}, Steve Labrie\textsuperscript{1}, Alain Doyen\textsuperscript{1}

\textsuperscript{1}Department of Food Sciences, Dairy Research Center (STELA), Institute of Nutrition and Functional Foods (INAF), Université Laval, Québec, QC, Canada

Impact of adding sodium caseinate on rennet-induced coagulation of reverse osmosis milk concentrates

Marie-Pier B. Vigneux\textsuperscript{1}

\textsuperscript{1}Université Laval
Coagulation properties and cheese yield of ultrafiltrated cow milk
Paula Giménez, María Cristina Perotti, Guillermo George, Erica Hynes, Carina Viviana Bergamini
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A new cheesemaking technology using dairy powder useful to reduce the environmental impact of International trade in cheese.
Marielle Harel-Oger, Gilles Garric
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Preparation of processed cheese product from cow milk protein powder
Shriya Jaiswal, Dr. Sumit Arora, Dr. Rita Mehla, Dr. Vivek Sharma
1M.Tech research scholar, 2Principal Scientist (Dairy Chemistry), 3Senior Research Fellow, Dairy Chemistry

Effect of milk somatic cell count in goat cheese production
Nazli Turkmen, Halit Kanca
1Ankara University Faculty of Agriculture Department of Dairy Technology, 2Ankara University, Faculty of Veterinary Medicine, Department of Obstetrics and Gynaecology

Application of a cascade membrane filtration process to remove serum protein and standardise the casein, lactose and calcium content of cheese milk
Xiaofeng Xia, John Tobin, Mark Fenelon, Paul McSweeney, Diarmuid Sheehan
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Session D - Cheese structure and rheology

Dynamic in situ imaging of semi-hard cheese microstructure under large-strain tensile deformation: Understanding structure-fracture relationships
Prabin Lamichhane, Mark A. E. Auty, Alan L. Kelly, Jeremiah J. Sheehan
1Teagasc Food Research Centre Moorepark, Ireland, 2University College Cork, Ireland
Microstructure and fracture properties of semi-hard cheese: Differentiating the effects of primary proteolysis and calcium solubilisation

Prabin Lamichhane¹, Prateek Sharma¹, Deirdre Kennedy¹, Alan L. Kelly², Jeremiah J. Sheehan¹
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Solubility of carbon dioxide in casein matrices: Effect of pH, salt, temperature, partial pressure and moisture-to-protein ratio

Prabin Lamichhane¹, Prateek Sharma¹, Alan L. Kelly², Jens Risbo³, Fergal P. Rattray³, Jeremiah J. Sheehan¹
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Effect of addition of konjac glucomannan and soy soluble polysaccharides on the rheological, microstructural, and syneresis properties of rennet gels

Hao Ouyang¹, Kieran Kilcawley¹, Song Miao¹, Alan Kelly², Jeremiah Sheehan¹
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Residence time in the cooker-stretcher influences mozzarella cheese composition and structure

Ran Feng¹, Sylvain Barjon¹, Franciscus Winfried J van der Berg¹, Søren Kristian Lillevang², Lilia Ahrné¹
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Modification of texture and microstructure in cow and buffalo milk paneer, by thermal treatment and milk fat content

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The rheological properties of rennet gels depend on the divalent cation distribution in the casein micelles

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Impacts of curd washing on the development of the functional properties of Raclette cheese
Émilien Delorme¹, ², Benoît Paysant², Philippe Trossat², Yves Gaüzère³, Éric Beuvier¹, Christine Achilleos¹

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Determination of Cheese Volume, Density and Texture of Soft Cheeses
Zlatan Sarić¹, Nermina Hasanbasic², Miroljub Barac³
¹Deary Science Profesor, ²Student Food Science, ³Biochemistry Profesor

Microstructure and rheological properties of processed cheese spread with curdlan and scleroglucan as fat mimetics
Aleksandra Florczuk¹
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Session E - Innovation, functionality, nutrition and health

Glycomacropeptide Purified from Camel Milk Cheese Whey Inhibits the Adhesion of Enterotoxigenic Escherichia coli K88
Rami Althnaibat¹, Michael Gänzle², Heather Bruce²
¹PhD student at University of Alberta, ²University of Alberta

Impact of dairy matrices in a standardized meal on the lipid digestion using in vitro static and dynamic digestion models
Léa Guinot¹,², Laurie-Ève Rioux¹,², Steve Labrie¹,², Michel Britten¹,²,³, Sylvie Turgeon¹,²
¹Institute of Nutrition and Functional Foods (INAF), ²Dairy Science and Technology Research Centre (STELA), ³Agriculture and Agri-Food Canada

Understanding preferences for, and consumer behaviour towards, cheese among young, educated, internationally mobile Chinese consumers
Hao Ouyang¹, Bozhao Li², Mary McCarthy³, Song Miao¹, Kieran Kilcawley¹, Mark Fenelon¹, Alan Kelly², Jeremiah Sheehan¹
¹Teagasc Food Research Center Moorepark, Ireland, ²School of Food and Nutritional Science, University College Cork, Ireland, ³Department of Food Business and Development, University College Cork, Ireland
Consumer insights on vegetable substitutes to cheese
Corinne Amblard¹, Cécile Bord¹, Estelle Petit², Laura Zerbin³
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Bioactive peptides in Parmigiano Reggiano cheese: ripening, microorganisms and gastrointestinal digestion shaping a treasure.
Benedetta Bottari¹, Vincenzo Castellone¹, Barbara Prandi¹, Elena Bancelari¹, Tullia Tedeschi¹
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Risk assessment of alimentary transmission of tick-borne encephalitis viruses from goats to humans by means of milk and milk products in Swiss alpine regions
Jan-Erik Ingenhoff¹, Marc Mühlemann¹, Rahel Ackermann-Gäumann², Dominik Moor³, Thomas Berger¹
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Variations in the biochemical and functional properties of industrial low-moisture part-skim mozzarella during 4 months of storage at 4°C
Chak Ming To¹, Lien Vermeir¹, Barbara Kerkaert², Dirk Van Gaver², Paul Van der Meeren¹, Tim Guinee³
¹Ghent University, ²Milcobel CV, ³Teagasc Food Research Centre Moorepark

Screening of lactic acid bacteria based on their reduction kinetics
Edouard Munier¹,², Hélène Licandro¹, Solange Buchin², Christine Achilleos², Franck Dufrene², Eric Beuvier², Rémy Cachon¹
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Galactose Reduction in Cheddar Produced with Mesophilic and Thermophilic Starter Culture Blend
James Musetti¹
¹Cheese Technology Application Scientist
New picture analysis method for cheese browning evaluation.
Mikael Pianfetti¹, Florence Pailler¹, Fabien Buret¹

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Melting of cheese: a comparison between microwave heating and oven heating
Liesbeth van der Meulen¹, Tong Li², Kelly Muijlwijk¹, Thom Huppertz²
¹FrieslandCampina, ²FrieslandCampina, Wageningen University & Research

Milk processing resulting in low and high content of β-casein in cheese milk
Justyna Żulewska¹, Jarosław Kowalik¹, Justyna Tarapata¹, Adriana Łobacz¹, Bogdan Dec¹
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