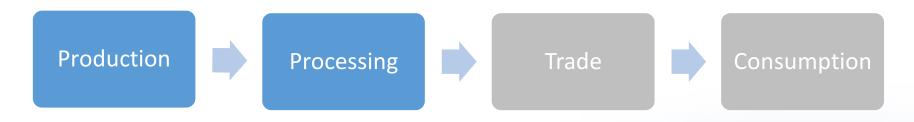


# IDF promotes sustainable milk production and processing



Nico van Belzen, PhD

**IDF Director General** 

IDF Forum at IDF World Dairy Summit 2017

30<sup>th</sup> October 2017, Belfast, UK



### Long history of supporting milk production and processing

#### CONGRÈS INTERNATIONAL

DE

# LAITERIE

Organisé par la Société Nationale de Laiterie de Belgique

SOUS LA PRÉSIDENCE D'HONNEUR DE

#### M. le Baron VAN DER BRUGGEN

Ministre de l'Agriculture et des Beaux-Arts

ET LA PRÉSIDENCE DE

#### M. le Baron Léon PEERS

Président de la Société Nationale de Laiterie

Bruxelles - 8, 9, 10 et 11 Septembre 1903

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HYGIÈNE DU LAIT ET DES PRODUITS LAITIERS

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Resolutions presented by D' F. C. HARRISON, Director Bacteriological Dep' Ontario Agricultural College, Guelph (Canada)

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# Dairy and the Sustainable Development Goals

Production Processing Trade Consumption

















# IDF IS ALIGNED WITH SDGS - LITERALLY







## The importance of food safety



#### World Health Organization: in 2010

- 600 million foodborne diseases
  - 1 of 11 people
- 420,000 deaths
  - 1 of 16,000 people
- 33 million healthy life years lost (DALYs)

#BUSINESS NEWS AUGUST 23, 2017 / 3:41 PM / 2 DAYS AGO



# Contaminated eggs cost Dutch chicken farmers 33 million euros

#### WHO ESTIMATES OF THE GLOBAL BURDEN OF FOODBORNE DISEASES



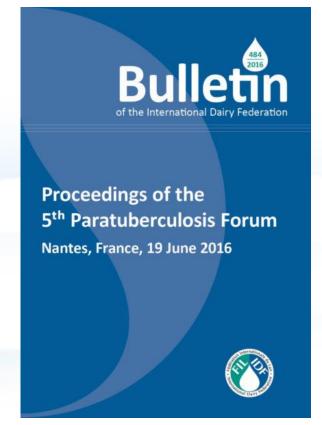


#### Milk production/processing – safety and hygiene













# Microbiological safety









# Prevention of adulteration





#### International Dairy Journal

Volume 68, May 2017, Pages 46-51



#### Short communication

Non-protein nitrogen determination: A screening tool for nitrogenous compound adulteration of milk powder

Jonathan W. DeVries<sup>a, 1</sup>, George W. Greene<sup>b</sup>, Anitra Payne<sup>c</sup>, Steven Zbylut<sup>a</sup>, Peter F. Scholl<sup>d</sup>, Paul Wehling<sup>a</sup>, Jaap M. Evers<sup>e</sup>, Jeffrey C. Moore<sup>f, ♣</sup> · <sup>™</sup>



#### Antimicrobial resistance

IDF Factsheet 003/2017-05

Scientific excellence Industry applicability Strategic networking Global influence





Responsible use of antimicrobial agents in the global dairy industry

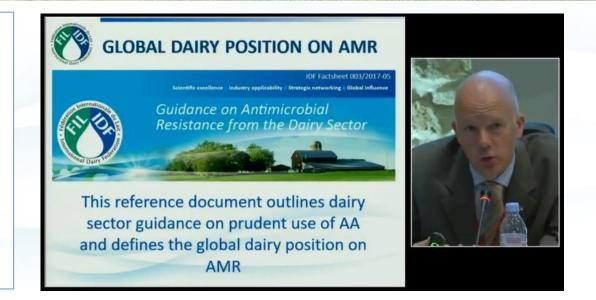
onal Dairy Fet

Nico van Belzen, PhD

Director General, International Dairy Federation

IACG, 17<sup>th</sup> October 2017, OIE Headquarters, Paris

Slideshow by María Sánchez Mainar, PhD





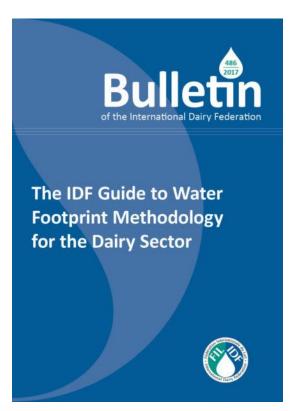
# Milk production/processing – environmental sustainability

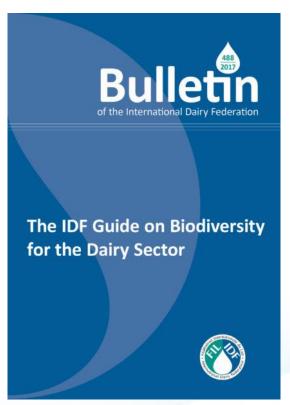
















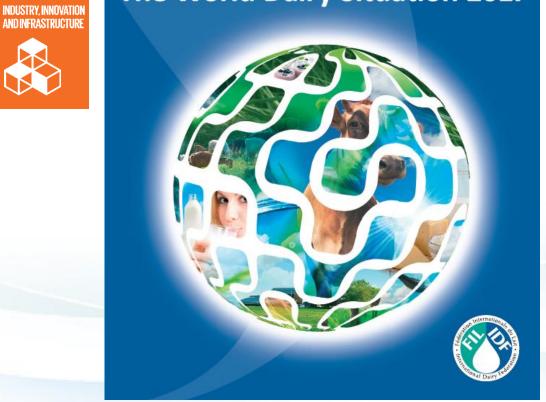




## Milk production/processing – socio-economic sustainability









Members of the IDF Standing Committee on Dairy Policies and Economics (SC DPE) from 11 countries<sup>1</sup> submitted country reports covering the six months leading up to April 2017. This fact sheet highlights the main findings from the review of the country reports as prepared by Peter Dawson (UK) and presented to the Committee at the SC DPE meeting held in Tel Aviv 26th April 2017.

#### Milk Production

Production trends for the latest period (October 2016 to April 2017) reported by the majority of EU countries were negative or weak. The largest declines were recorded for France at -5.6% and Ireland at -4.6%. The exception was Italy with +3.2%. Milk production in the Netherlands for 2017 was expected to contract due to the constraints of environmental legislation on phosphates.

ahead strongly in the second half of 2016 with some stabilization in the first period of 2017. However the expectation was that they will remain firm for the remainder of the year due to strong demand growth.

However protein prices remained weak with significant stocks over-hanging the market. The underlying trend would be clarified once the EU had passed its production peak in May. On the world market the GDT auction recorded similar overall trends.



# Milk processing



The importance of salt in the manufacturing and ripening of cheese



Scientific excellence | Industry applicability | Strategic networking | Global influence

Scientific excellence Industry applicability Strategic networking Global influence



Escherichia coli as indicator in cheese processing

IDF Factsheet – December 2016

Scientific excellence Industry applicability Strategic networking Global influence



Use of wood in cheese ripening

IDF Factsheet - November 2016



## Milk processing

TECHNICAL SPECIFICATION

ISO/TS 19046-1

IDF/RM 233-1

First edition 2017-05

TECHNICAL SPECIFICATION

Cheese — Determination of propionic acid level by chromatography —

Part 1:

Method by gas chromatography

Cheese — Determination of propionic acid level by chromatography —

Part 2:

Method by ion exchange chromatography

INTERNATIONAL STANDARD

ISO 11816-2

> IDF 155-2

Second edition 2016-08-15

INTERNATIONAL STANDARD

Milk and milk products — Determination of alkaline phosphatase activity —

Part 2:

Fluorimetric method for cheese

Milk and milk products — Determination of alkaline phosphatase activity —

Part 1:

Fluorimetric method for milk and milk-based drinks



# Ongoing projects in milk production and processing (examples 1/3)

- Antimicrobial resistance
  - Prudent use of antimicrobial agents in dairy farming minimizes the risk of AMR, while optimizing animal health and production
  - Contribute to the Codex Alimentarius working group on AMR

- IDF guide to good animal welfare practices 2.0
  - Good animal welfare practices in the dairy sector strengthen the 'license to operate' from general society
  - Collaboration between IDF Standing Committees on Animal Health and Welfare and Farm Management



# Ongoing projects in milk production and processing (examples 2/3)

- Bulletin on pasteurization; update incorporating latest technologies
- Non-proprietary method for measuring alkaline phosphatase activity as test of pasteurization
- Standards for infrared technology and in-line control, e.g.
  - Standardization of FT-MIR instruments for milk analysis
  - Recombined milk samples for calibration and quality control in mid-infrared milk analysis



# Ongoing projects in milk production and processing (examples 3/3)

- Eco-friendly dairy processing practices
  - Joint action team of IDF Standing Committees on Environment,
     Animal Health and Welfare, and Dairy Science and Technology
- 3<sup>rd</sup> IDF Symposium on Microstructure of Dairy Products
  - Co-organized with IDF NC Canada and Elsevier
  - Montréal, Canada, June 3-6, 2018



#### Long history of supporting milk production and processing...

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leading to a bright future for sustainable production of milk DAIRY ANIMALS and indirectly supports the livelihoods of 150 million ARE à poverty POPULAR ASSET farmers, including the Poor ones. It also generates employment opportunities in all its forms along the value chain! everywhere! Milk is one of the most produced and valuable agricultural commodities worldwide! 05° WE WILL CREATE FURTHER, MOMENTUM This decapation Will enable Focus better coordination HER LITER OF MILK BY 2/54 ACHIEVE GENDER EQUALITY See Fee 17 NEY ROLE IN WHICH EVERY PERSON HAS ALLESS TO THE FOOD THEY NEED FOR AN