

Achieving sustainable production of milk

Volume 1: Milk composition, genetics and breeding

Edited by Dr Nico van Belzen
International Dairy Federation (IDF), Belgium



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SCIENCE PUBLISHING

ISBN

Hardback: 978 1 78676 044 9

PDF: 978 1 78676 047 0

ePub: 978 1 78676 046 3

Mobi: 978 1 78676 045 6

Publication date

February 2017

Price

£130.00/\$165.00/€160.00

Length

280 pages

Trim

229 x 152 mm / 6.00 x 9.00 in

BISAC classification

TEC003070 - TECHNOLOGY &
ENGINEERING / Agriculture /
Sustainable Agriculture

BIC/Thema classification

TVHF - Dairy farming
TVB - Agricultural science
TVF - Sustainable agriculture



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New book advance information

Achieving sustainable production of milk Volume 1

Milk composition, genetics and breeding

Edited by: Nico van Belzen, Director General of the International Dairy Federation (IDF), Belgium

Endorsement:

"As demand for dairy products continues to grow, and with sustainable nutrition and food security at the top of the global agenda, it is imperative that we develop and share the latest knowledge, practices and issues relating to sustainability of dairy chains. With a veritable Who's Who of dairy expertise and an expert editor in IDF Director General Nico van Belzen, *Achieving sustainable production of milk* will go a long way to achieving this."

Dr Jeremy Hill, President - IDF/Chief Technology Officer - Fonterra Co-operative Group Ltd.

Key features:

- Summarises latest research on the composition of proteins and other components in milk;
- Reviews advances in understanding factors affecting milk quality eg. breeding and nutrition;
- Discusses current research on genetic factors affecting dairy cattle growth and health as well as ways to optimise breeding to improve the productivity of dairy cows

Description:

Cow's milk is one of the world's most important agricultural food products. Its importance in the diet is widely acknowledged and it is an essential ingredient in a wide range of foods. In meeting rising demand, more intensive dairying systems face a range of challenges such as maintaining high standards of safety in the face of the continuing threat from zoonoses entering the food chain, whilst sustaining nutritional and sensory quality. At the same time farms need to become more efficient and sustainable. Finally, farming must also meet higher standards of animal health and welfare. Smallholder systems in developing countries face problems such as poor cattle nutrition, low productivity and vulnerability to disease which impact on safety, quality, sustainability and animal welfare.

Drawing on an international range of expertise, this book reviews research addressing these challenges. It begins by discussing the composition of milk including proteins and bioactive components, the wide range of ingredients produced from milk, as well as aspects sensory quality. It also reviews current understanding of genetic factors affecting protein and other aspects of milk composition, other desirable traits such as fertility and advances in breeding to achieve improvements in quality and productivity in dairy farming.

Achieving sustainable production of milk Volume 1: Milk composition, genetics and breeding will be a standard reference for animal and dairy scientists in universities, government and other research centres and companies involved in milk production. It is accompanied by two further volumes which review safety, quality and sustainability issues as well as dairy herd management and welfare.

Editor details:

Dr Nico van Belzen is Director-General of the International Dairy Federation (IDF), Belgium. He has occupied senior roles in both industry and research organisations, both as Head of the Research and Analysis department at the ingredients division of Campina and as Executive Director of the European Branch of the International Life Sciences Institute (ILSI).

New book advance information

Table of contents

Part 1 The composition and quality of milk

- 1.The proteins of milk:*Shane V. Crowley, James A. O' Mahony and Patrick F. Fox, University College Cork, Ireland*
- 2.Bioactive components in cow's milk:*Young W. Park. Fort Valley State University, USA*
- 3.Ingredients from milk for use in food and non-food products: from commodity to value-added ingredients:*Thom Huppertz and Inge Gazi, NIZO food research, The Netherlands*
- 4.Understanding and preventing spoilage of cow's milk:*Gisele LaPointe, University of Guelph, Canada*
- 5.Sensory evaluation of cow's milk:*Stephanie Clark, Iowa State University, USA*

Part 2 Genetics, breeding and other factors affecting quality

- 6.Genetic factors affecting fertility, growth, health and longevity in dairy cattle:*Joel Ira Weller, Agricultural Research Organization, The Volcani Center, Israel*
- 7.Using genetic selection in the breeding of dairy cattle:*Julius van der Werf, University of New England, Australia and Jennie Pryce, Department of Economic Development, Jobs, Transport and Resources (Government of Victoria) and La Trobe University, Australia*
- 8.Breeding and management strategies to improve the productivity of dairy cattle:*Divakar J Ambrose, University of Alberta, Canada and John P Kastelic, University of Calgary, Canada*
- 9.Nutritional strategies to improve nitrogen efficiency and milk protein synthesis in dairy cows:*James D. Ferguson, University of Pennsylvania, USA*

Other products in this category

- Ensuring safety and quality in the production of beef Volume 1 Safety
- Ensuring safety and quality in the production of beef Volume 2 Quality
- Achieving sustainable production of milk Volume 2 Safety, quality and sustainability
- Achieving sustainable production of milk Volume 3 Dairy herd management and welfare
- Achieving sustainable production of sheep
- Achieving sustainable production of pig meat Volume 1 Safety, quality and sustainability
- Achieving sustainable production of pig meat Volume 2 Animal breeding and nutrition
- Achieving sustainable production of pig meat Volume 3 Animal health and welfare
- Improving organic animal farming