

Editorial: The Journal of Dairy Research

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Welcome to the February 2016 issue of the Journal of Dairy Research. To my knowledge, this is the first time in our 87 year history that we have published an Editorial. The Journal's raison d'être has been, and continues to be, the dissemination of novel, international quality research conducted in the broad spectrum of sciences that are concerned with the production and utilisation of milk. Future Editorials might contribute to that purpose by reporting scientific advance. This one, however, is a little different, in that it deals with the Journal itself. This Editorial gives me a public opportunity to thank a number of people. I shall then go on to briefly consider why the Journal came into being, why it has been so important for so many years, and why it will remain a major force for many years to come. Finally, I shall explain the Journal's new systems and policies, and provide an updated and futuristic interpretation of the Journal's scope and aspirations.

First and foremost, I thank the outgoing Editors, David Chamberlain and Eric Needs, for their dedicated and skilful shepherding of the Journal in recent years. Not only have they maintained excellent standards of scientific communication, they have also done that in a uniquely personal way, as many of you reading this will have experienced at first hand. I can assure you that the Journal remains fully committed both to scientific excellence and to all of its contributors as excellent scientists. I also thank the Trustees of the Hannah Research Foundation for having faith in me as the new Editor in Chief, and the University of Copenhagen (Denmark) for allowing me to undertake the task. My Editorial duties will be made easier by the valuable assistance of an Executive Editorial Team, and I am grateful to Mansel Griffiths (University of Guelph, Canada) and Eric Hillerton (Massey University, New Zealand) for being the first members of that team. We are gradually creating an Editorial Board that will reflect the Journal's broad scientific and geographical horizons, and once again I extend thanks to those who have already committed time and effort to the Board. Peer Review is a time-consuming exercise, and we are deeply indebted to all those other expert referees who have given freely of their time during 2015 and before. Last, but by no means least, I thank all who have submitted their research for consideration. Without manuscripts, the Journal would not exist.

“When history comes to be written, no man, I believe will be found to have played a greater part in the moulding of the thoughts of his generation than Sidney Webb”.

The very first words written in the Journal were a Foreword, from none other than the Rt. Hon. Lord Passfield, who preferred to be known simply as Sidney Webb. The above quote from the 5th Marquess of Salisbury, sometime Leader of the House of Lords, clearly establishes the credentials of the writer. Lord Passfield was not a scientist, nor was he directly involved in the dairy industry in any formal way. He was a politician with a keen interest in societal betterment, and his Foreword dealt exclusively with the need for dairy research and the benefits it could bring.

“The need of a Journal of Dairy Research for the Empire was voiced by those who spoke on behalf of dairy research workers in all parts of the Empire at the Imperial Agricultural Research Conference of October, 1927”.

Lord Passfield's opening sentence made clear that the Journal was to have an international voice, for in 1929 ‘the Empire’ truly spanned the globe. This desire to focus on needs and to be truly international (but not Imperial!) is something that we should, and do, still strive for. The first issue contained only 4 full papers, of which one focused on Canada and another on New Zealand (the national affiliations of our first Executive Editors are entirely serendipitous, but nevertheless significant!) Currently we have almost 100 manuscripts under consideration from 6 of the world's 7 continents (the missing continent, Antarctica, last appeared in volume 73: Ronimus et al. 2006). Although the Journal was first published in 1929, it had been conceived a year earlier, jointly by the National Institute for Research in Dairying (NIRD) in Reading, England and the Hannah Research Institute in Ayr, Scotland. The reason why the UK Government directly supported two research Institutes committed to dairying was quite simple; there was a post-war need for research that would increase food production. That research was successful, the UK moved from food scarcity to food excess and in 1985 NIRD ceased to exist as an independent Institute, followed in 2006 by the Hannah. At a global level, however, the need for increased food production continues apace, so it is correct and proper that the Journal should have achieved greater sustainability than the Institutes. I shall not dwell on the problems posed by our burgeoning world population, for they will be familiar to most readers. Suffice to say that food security will remain a high priority

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for decades to come, dairy production will be a most important part of that, and the Journal will continue to support its improvement and evolution.

The scope of the original Journal can be judged from its contents, which in the first issue included feeding standards for cows, chemical and physical properties of milk, control of bovine tuberculosis and benefits of milk consumption for children. 'Dairy research' evokes many different images, for it covers a multitude of disciplines. How to handle such diversity is open to debate. One solution would be to categorise articles by research area, but for me that is an abdication of responsibility. If the global need is to optimise food security, we should accept our obligation to cover the whole of the dairy foods chain, and to do it with as much integration as possible. So, the scope remains essentially the same, but the expression of that scope has evolved. The Journal welcomes papers dealing with feed inputs to lactating animals, papers dealing with the lactating animal's health, welfare and productivity and with the functioning of the lactating animal's mammary tissue. The product of lactation is milk, and the Journal welcomes papers dealing with different qualities of the milk itself, as well as all technological, processing and biofunctional aspects of products derived from that milk. Milk is a food, and lactation is fundamentally for the benefit of the consumer rather than the producer. So the Journal also welcomes papers dealing with the nutritional and health benefits (or risks) provided to the consumer. Feed, lactating animal, mammary gland, milk, processed product, consumer; it is a chain and no one component need be considered a weak link. Rather than categorise, this Journal will present each issue in the sequence of the dairy foods chain, an innovation that has already happened quietly in the previous two issues. Commencing with this current issue we introduce ourselves as 'An International Journal of the Lactation Sciences'. Lactation is interpreted broadly. The focus is still very much on dairy species, and always will be, but you may reflect that in 1929 the only dairy species meriting serious consideration would have been the cow. In 2016, dairy species could be taken to include buffalo, goat, sheep, camel, yak and even equidae. Given that at least one farmer is now producing porcine milk cheese, who knows what 2050 will bring! The more serious point is that, if we

are to truly serve human society we should recognise that study of breastmilk and human lactation is not only relevant but desirable, and if we are to best manipulate elements such as milk protein content we should appreciate that lactating marsupials modulate protein to a greater extent than any other mammal. In other words, comparative aspects of lactation biology are welcome. Furthermore, the Journal will be just as comparative and embracing in dealing with diverse milk products, and I call on dairy technologists to help us achieve that. During the course of this year there will be further evolution as the Journal re-launches itself towards its centenary. I hope that you will wish to be part of that! In addition to Editorials, the Journal will henceforward publish Invited Reviews (starting with this issue) and Research Communications (starting in May). I am very excited that the first Invited Review deals with the very topical and perhaps somewhat controversial issue of genetic engineering. *Genetically Engineering Milk* (Whitelaw et al. 2016) sets a pattern for future reviews, which should be prospective as well as retrospective. Equally exciting, the review comes from collaborators in the UK and India, reinforcing the international context. If you have suggestions for future reviews (should the next be *Technologically Engineering Milk?*) please get in touch.

If you are reading this, then you most probably have an interest in dairy research. I hope this means that you will wish to join our contributor's community. The Journal is still firmly associated with Cambridge University Press and you will find all published content on the well-established Cambridge Journals website. For the past few months we have been developing a second website for submissions and peer review, and that is now fully operational. Please feel part of our community, and use the website, www.journalofdairyresearch.org Enjoy the Journal!

References

- Ronimus RS, Rueckert A & Morgan HW 2006 Survival of thermophilic spore-forming bacteria in a 90+ year old milk powder from Ernest Shackleton's Cape Royds Hut in Antarctica. *Journal of Dairy Research* 73 235–243
- Whitelaw CBA, Joshi A, Kumar S, Lillico SG & Proudfoot C 2016 Genetically engineering milk. *Journal of Dairy Research* 83 3–11