Article Collections available now on the Journal of Dairy Science® (JDS) website

We are pleased to make available an enhancement to the JDS—the Article Collections. There are now thirteen collections available online that cover both production and dairy foods related topics. The collections are compilations of significant papers and research developments within a particular subject area, selected by experts in that area. All papers have been published in the JDS. The following collections are now available at http://www.journalofdairyscience.org/.

Editor's Choice – 2016, 2015, 2014

This compilation features articles selected by the Editor-In-Chief as being especially notable for their contribution to dairy science, specifically in the areas of dairy foods and dairy production (physiology, management, nutrition, and genetics). Editor's Choice is a feature of each Journal issue, and articles selected are made available for free access.

http://www.journalofdairyscience.org/content/edchoice

Balanced Breeding

Goals for Health, Reproduction, Longevity, Feed Efficiency, and Functional Traits

Compiled by Filippo Miglior, 1,2 Jennie Pryce, 3 Bjorg Heringstad, 4 and Christa Egger-Danner, 5 with the help of Angela Wilson1 and Caeli Richardson1

1 University of Guelph; 2 Canadian Dairy Network; 3 Department of Economic Development, Jobs Transport and Resources, Victorian Government and La Trobe University; 4 Norwegian University of Life Sciences (NMBU); 5 ZuchtData EDV-Dienstleistungen GmbH

Dairy cattle breeders have been developing selection goals based on economic and societal drivers and the availability of breeding values at the time. For many decades, selection objectives were focused mainly on milk production traits and partly on conformation impacting many dairy cow fitness traits. With the availability of breeding records, somatic cell scores (SCS) and longevity, selection indexes in most countries were then enhanced to include fertility, longevity and udder health. With the implementation of genomic selection, animal breeding has been even more proactive by developing complex breeding objectives in order to respond to limited resources, global warming, animal health and welfare, and challenging farming conditions. The Journal of Dairy Science is a leading source of scientific information on dairy breeding objectives and quantifying selection responses to new selection indices. The Journal of Dairy Science has assembled a collection of research articles on the subject, and ADSA has made all articles in this collection freely available for 30 days due to the importance of the subject matter.
Casein
Compiled by the ad hoc ADSA Milk Protein and Enzyme Committee - Rafael Jiménez-Flores, Milena Corredig, and Rodrigo Roesch.
The papers in this collection represent seminal ideas published in the Journal of Dairy Science (JDS) and were selected as examples of outstanding contributions to the field of milk caseins. This list is not meant to be an exhaustive list of relevant articles in the field. We have roughly delineated the areas where the papers were likely to contribute in dairy science, but this is arbitrary, as these papers have been cited in many different areas of milk research. http://www.journalofdairyscience.org/casein

Estrus Technology
Compiled by Karmella Dolecheck, Lauren Mayo, and Jeffrey Bewley, University of Kentucky
This compilation represents the seminal papers in automated estrus detection published in the Journal. The collection provides a broad view of the progression of technologies over time and the adoption of and criteria for evaluating technologies.
http://www.journalofdairyscience.org/content/estrustech

Invited Reviews
The section includes Invited Reviews in the following Journal sections:

- Invited Reviews: Animal Nutrition
- Invited Reviews: Breeding, Genetics, and Genomics
- Invited Reviews: Dairy Foods
- Invited Reviews: Health, Behavior, and Well-Being
- Invited Reviews: Physiology
- Invited Reviews: Resources and Environment

All are available at: http://www.journalofdairyscience.org/invited-reviews

Lactic Acid Bacteria Collection
Lactic Acid Bacteria—Selective culturing, isolation, and general characteristics
Compiled by: Matthew Renschler and John L. McKillip, Ball State University, Muncie, IN USA

Lactic acid bacteria are commonly used in the dairy industry for the fermentations of dairy products such as milk, cheese, yogurt, and sauerkraut. The most commonly used media for culturing these lactic acid bacteria is MRS (Ao et al., 2012; Gezginc et al., 2015), which can be modified with sorbitol (Oberg et al., 2011) or supplemented with different sugars such as galactose or maltose (Dave and Shah, 1996). Although MRS medium is the most commonly used to culture or isolate multiple lactic acid bacteria, many media are available for the individual isolation of specific species. Leuconostoc selective agar is used for the isolation of Leuconostoc mesenteroides from sauerkraut (Ao et al., 2012), whereas KF Streptococcus agar is one used for Streptococcus thermophilus from yogurt. Other media used for isolation of specific lactic acid bacteria include Elliker, Lee’s medium for Streptococcus species (Biede et
al., 1975), Lactobacillus selective agar, LM17 agar (Gezginc et al., 2015), SM17 agar, and Edward’s agar (Sawant et al., 2002). While each lactic acid bacteria species has a specific medium with different cultural conditions, there are selective media against lactic acid bacteria that are used for detecting and differentiating bifidobacteria, such as lithium-chloride sodium propionate agar (Lapière et al., 1992), Pseudomonas species such as blood glucose liver agar with oxgall and gentamicin or crystal violet agar with tetrazolium (Tassell et al., 2012), and contaminant coliforms such as Petrifilm (Masiello et al., 2016). In developing a selective media for only lactic acid bacteria, Lactobacillus bulgaricus and Streptococcus thermophilus have demonstrated resistance to aminoglycosides such as kanamycin, streptomycin, neomycin, and gentamycin (Zhou et al., 2012).

Listeria monocytogenes and Dairy Products
Compiled by Maxwell L. Van Tassell, Garrett P. Hoepker, and Michael J. Miller, University of Illinois
This collection of Journal of Dairy Science articles presents research from the past several decades regarding the interaction between Listeria monocytogenes and dairy products. It includes insight into where Listeria can be found, specific antimicrobial measures, and how the food matrix impacts microbial activity. [http://www.journalofdairyscience.org/listeria](http://www.journalofdairyscience.org/listeria)

Mastitis and Milk Quality Collection
Compiled by Pamela L. Ruegg, University of Wisconsin
This collection has been compiled to represent seminal articles that illustrate key concepts in the understanding and control of mastitis. It does not include papers dealing with milking machines or sensing technologies. The papers are ordered chronologically and represent the evolution of the disease over more than half a century. It is hoped that review of these papers will help future researchers build on past knowledge. This collection was challenging to assemble because of the scope of the disease and the tremendous breadth of the subject; several thousand articles on this topic can be retrieved from the Journal of Dairy Science archives using relevant search terms. [http://www.journalofdairyscience.org/content/mastitismilkquality](http://www.journalofdairyscience.org/content/mastitismilkquality)

Most-Cited Awards
To reward authors for contributing outstanding articles to the Journal of Dairy Science®. Four articles to be selected each year, one from each of the four sections of the journal: Dairy Foods; Physiology and Management; Nutrition, Feeding and Calves; and Genetics and Breeding. For current year recognition, the article will have been published during the calendar year three years prior. Articles within the section with the most citations from the date of publication to April 15 of the recognition year will be awarded. [http://www.journalofdairyscience.org/content/mostcited2015](http://www.journalofdairyscience.org/content/mostcited2015)

Pregnancy Diagnosis and Resynchronization Collection
Compiled by Paulo D. Carvalho, Rafael Barletta, and Paul M. Fricke, Department of Dairy Science, University of Wisconsin–Madison
This compilation represents the most significant papers published in JDS on methods for pregnancy diagnosis and strategies for resynchronization of ovulation in lactating dairy cows. [http://www.journalofdairyscience.org/content/pregnancy](http://www.journalofdairyscience.org/content/pregnancy)
Stocking Density
The ideal stocking density for freestall barns has been a hotly debated topic in dairy cattle management.
Compiled by Cassandra B. Tucker, University of California, Davis

Dairy producers overstock to save building costs per cow or when growth exceeds capacity to build new facilities. However, there is considerable variation in how much farms overstock freestall barns. The *Journal of Dairy Science* is a leading source of scientific information on the health, behavior, and well-being of dairy cattle. To enable the dairy community to better understand the science addressing the practice of overstocking, The *Journal of Dairy Science* has assembled a collection of research articles on the subject and has made these freely available to better inform discussion in the dairy community.

Tail Docking Collection
The practice of tail docking is being hotly debated in dairy industry, in part because of new guidelines for milk producers. The *Journal of Dairy Science* is a leading source of scientific information on the health, behavior, and well-being of dairy cattle. To enable the dairy community to better understand the science addressing the practice of tail docking, The *Journal of Dairy Science* has assembled a collection of research articles on the subject and has made these freely available to better inform discussion in the dairy community. [http://www.journalofdairyscience.org/taildocking](http://www.journalofdairyscience.org/taildocking)

Timed AI Programs at First Insemination in Lactating Dairy Cattle
Compiled by Jeffrey S. Stevenson, Kansas State University,
This collection of *Journal of Dairy Science* articles (1998–2015) represents key papers in the history and application of timed artificial insemination programs for lactating dairy cows. The collection begins with the first paper published in 1998 that applied Ovsynch to lactating dairy cows and follows with developments of presynchronization strategies including prostaglandins alone or in combination with GnRH, addition of progesterone inserts to all cows or targeted to low fertility cows without a corpus luteum, reducing the Ovsynch program from 7 to 5 d, and incorporation of detected estrus before timed AI. [http://www.journalofdairyscience.org/invited-reviews](http://www.journalofdairyscience.org/invited-reviews)

All collections are now available at [http://www.journalofdairyscience.org](http://www.journalofdairyscience.org). ADSA provides the collections as a service to the global dairy industry, enhancing the value that JDS already provides by creating content collections curated by ADSA members who are recognized experts in the field. Full access to all articles in every collection is provided to individual members and e-members of ADSA as well as institutional subscribers. Many articles are openly available and therefore accessible to all readers. To learn more about ADSA or to become a member go to [www.adsa.org](http://www.adsa.org).