

CURRICULUM VITAE
Bradley J. Taylor, Ph.D.

Associate Professor of Food Science (current position)

Department of Nutrition, Dietetics & Food Science
Brigham Young University
S-127 Eyring Science Center
Provo, UT 84602 USA
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PROFESSIONAL EXPERIENCE:

Brigham Young University, Provo, UT

2017 – Present Associate Professor, Food Science [advancement to CFS (BYU's tenure) candidacy effective Fall Semester 2020]

WhiteWave Foods (now Danone North America), Broomfield, CO

2015 – 2017 Sr. Director, Research Sciences and Regulatory Affairs

Bristol-Myers Squibb / Mead Johnson Nutrition (now Reckitt), Evansville, IN and Mexico City, MÉXICO

2013 – 2015 Assoc. Director, Product Development Children's & Specialties, Global Research and Development
2010 – 2013 Assoc. Director, Product Development, Latin America Region, Global Research and Development
2006 – 2010 Principal Product Development Scientist, Global Research and Development

National Food Processors / Food Products Association (now Consumer Brands Association), Washington, DC

2005 – 2006 Executive Director, FPA Research & Education Foundation
2005 Technical Business Manager, Food Processors Institute
2004 Assoc. Microbiologist, Center for the Development of Research Policy & New Technologies

Center for Microbe Detection and Physiology, Utah State University, Logan, UT

2001 – 2004 Research Scientist – Surface Chemistry and Microbiology

Nestle USA, Frozen Foods Division, Springville, UT

1999 Quality Assurance Technician, Microbiology

EDUCATION:

2004 Ph.D., Nutrition and Food Science, Utah State University, Logan UT
1999 B.Sc., Food Science, *Cum Laude*, Brigham Young University, Provo, UT

Additional Training

2021 Journal of Dairy Science Author Workshop: Developing your best manuscript
2020 Blended & Remote Classroom Technology Training, BYU Office of Information Technology
2019 Experiential Learning Summit, BYU Careers and Office of Experiential Learning
2018 Faculty Development Series, BYU Faculty Center "Spring Seminar"
2018 Food Labels (Institute of Food Technologists Short Course)
2017 Effective Teaching Workshop, New Faculty Teaching Fellowship (BYU Center for Teaching and Learning)
2016 Zenger Folkman Extraordinary Leader Program™
2014 Leadership 360° - The Journey of Not Knowing®
2012 Center for Creative Leadership – Leadership Development Program (LDP)®
2008 Microencapsulation in Food Applications (Institute of Food Technologists Short Course)
2008 Manager Development Program (Bristol-Myers Squibb)
2007 Novel/Non-thermal Processing Technologies (Institute of Food Technologists Short Course)

LANGUAGE PROFICIENCY: English (Native), Spanish (Moderate Proficiency), Polish (Basic)

SOCIETY MEMBERSHIPS:

Institute of Food Technologists (IFT)
International Association for Food Protection (IAFP)

HONORS AND AWARDS:

- 2020 Reviewer Recognition Award [Elsevier Peer Review]
- 2020 Institute of Food Technologists Outstanding Volunteer Award
- 2019 Chapter of the Year - Institute of Food Technologists Student Association [Faculty Mentor]
- 2018 Idaho Milk Processors Association New Product Competition Grand Prize [Faculty Mentor]
- 2015 Mead Johnson Global R&D Management Award – Operational Excellence
- 2014 Mead Johnson Global R&D Management Award – Scientific Collaboration Excellence
- 2013 Mead Johnson Global R&D Management Award – Nutrition for Prematurity
- 2013 DANUI “Healthy Innovations” in the foods and beverages category - 1st Place - Cal C Tose Complete [DANUI (Mexico) was created in 1998 to advocate for healthy foods, especially for children]
- 2008 Mead Johnson Excellence in Action – U.S. launch of Nutramigen® LIPIL® with Enflora™ LGG®
- 2008 Mead Johnson Global R&D Management Award – Technology Scouting
- 2008 Mead Johnson Global R&D Management Award – Significant Technical Contribution Resulting in *Lactobacillus rhamnosus* GG Ingredient Qualification Enabling US launch and Heath Canada Novel Ingredient Notification
- 2007 Mead Johnson Global R&D Management Award – Technical Leadership Resulting in Advanced Launch of Next Step™ LIPIL® Ready-to-Drink
- 2006 FPA Management Award – Leadership Transformation of Research & Education Foundation
- 2004 Utah State University Researcher of the Year – College of Agriculture
- 2002 Western Regional Champion – Institute of Food Technologists Student Association College Bowl
- 2000 Utah State University – Department of Nutrition and Food Science Ghandi Fellowship

SERVICE AND ADVISORY RESPONSIBILITIES:

Brigham Young University

- 2019 – present Food Science IFTSA Chapter/Club – Outreach and Web Liaison
- 2017 – present Nutrition, Dietetics, and Food Science Department Seminar Committee
- 2017 – present Nutrition, Dietetics, and Food Science Department Graduate Studies Committee
- 2004 – 2016 Industry Advisory Council Nutrition, Dietetics, and Food Science Department

Institute of Food Technologists

- 2020 - present Ad-hoc Reviewer: emerging opportunities to advance global science of food & sustainability
- 2020 - present Board Member- at large, Bonneville Section (Salt Lake City, Utah)
- 2018 – 2020 Secretary, Bonneville Section (Salt Lake City, Utah)
- 2017 – 2019 Annual Meeting Scientific Program Advisory Panel
- 2006 Western Regional Student Association College Bowl Judge

International Association for Food Protection - Professional Development Groups

- 2018 – present Beverages and Acid/Acidified Foods (Member)
- 2018 – present Dairy Quality and Safety (Member)
- 2018 – present Food Safety Education (Member)
- 2018 – present Fruit and Vegetable Safety and Quality (Member)
- 2018 – present HACCP Utilization and Food Safety Systems (Member)
- 2018 – present International Food Protection Issues (Member)
- 2018 – present Low Water Activity Foods (Member)

Mead Johnson Nutrition

- 2013 – 2015 Global Technology Roadmapping Team
- 2011 – 2015 Pediatric Nutrition Institute Technical Advisory Committee
- 2012 – 2013 México Operations Committee and Leadership Team
- 2010 – 2013 International Temporary Assignment (expatriate) LatAm Regional Headquarters

Institute for Food Safety and Health (formerly National Center for Food Safety & Technology)

- 2008 – 2009 Technical Advisory Committee

Foreign Better Process Control School - US FDA and Louisiana State University

- 2005 – 2006 Program Manager (Kiev, Ukraine)

TEACHING RESPONSIBILITIES:

Brigham Young University:

NDFS 250	(3 Cr)	Essentials of Food Science
NDFS 363	(2 Cr)	Commodity Processing II: Dairy, Fruits, Vegetables, and Confections
NDFS 462	(3 Cr)	Food Regulations and Quality Assurance
NDFS 631R	(2 Cr)	Selected Topics in Food Science
NDFS 652	(3 Cr)	Carbohydrates and Their Reactions in Foods

Other courses and lectures as assigned

In a year of severe COVID restrictions, adaptations applied in the classroom resulted in “composite student ratings” (CSR) in highest band for 4 of 5 sections (courses); CSR low = 4.2/5.0 & high 4.9/5.0 [this includes all courses in the 2020-2021 academic year].

Undergraduate student mentoring outside the classroom (another form of teaching) initially contracted as campus closed down in early 2020. However, with updated protocols undergraduate mentoring increased >55% during the 2020-2021 academic year compared to the baseline of 2019-2020. This influx of talent enabled our lab to launch new projects and expand the applied research capabilities despite the supply chain disruptions, restrictions and challenges associated with the global pandemic.

RESEARCH FUNDING:

1. Thermal resistance of *Listeria monocytogenes* in low-moisture foods (LMF); \$5000 Grocery Manufacturers Association. Awarded December 2017.
2. Genetic interactions resulting in exceptional desiccation and thermal resistance of *Cronobacter ssp.* in low-moisture food (LMF) matrices; \$48,500 BUILD Dairy/Western Dairy Center. Awarded January 2018 (distributed over two years).
3. Sporeformer presence and control in a milk fractionation process; \$35,000 BUILD Dairy/Western Dairy Center. Awarded June 2018 (distributed over two years). F.M. Steele (Co-PI).
4. Vitamin stability of dairy-based foods fortified with ferrous sulfate; \$72,000 BUILD Dairy/Western Dairy Center. Awarded May 2019 (distributed over two years).
5. Food Safety and Preservation Outreach (WE19MNG0016); \$48,200 Latter-day Saints Charities - Mongolia (formerly Deseret International Charities). Awarded Aug 2019 (distributed over 1.5 years).
6. Bioconversion of dairy lactose to rare sugars; \$103,370 BUILD Dairy/Western Dairy Center. Awarded July 2020 (distributed over three years).
7. Heat resistance of foodborne pathogens & surrogates of interest: Semolina flour and resultant pasta products; \$44,000 Welfare Services - Church of Jesus Christ of Latter-day Saints. Awarded December 2020 (distributed over two years).
8. Rapid and Sensitive Detection of Foodborne Pathogens in Dairy Powders; \$69,594 BUILD Dairy/Western Dairy Center. Awarded July 2021 (distributed over two years). B.D. Geary (Co-PI).

PEER-REVIEWED PUBLICATIONS:

Mentored BYU student authors/presenters designated in blue bolded text

1. **Quinn, A.R., Liao, R.**, Steele, F.M., Jefferies, L.K., & **Taylor, B.J.** (2021). Isothermal inactivation of *Salmonella*, *Listeria monocytogenes*, and *Enterococcus faecium* NRRL B-2354 in peanut butter, powder infant formula, and wheat flour. *Food Control*. Vol. 121, 107582. (accepted Aug. 2020) [doi:10.1016/j.foodcont.2020.107582](https://doi.org/10.1016/j.foodcont.2020.107582)
2. **Taylor, B.J., Quinn, A.R.**, & Kataoka, A. (2019). *Listeria monocytogenes* in low-moisture foods and ingredients. *Food Control*. Vol. 103, 153-160. [doi:10.1016/j.foodcont.2019.04.011](https://doi.org/10.1016/j.foodcont.2019.04.011)
3. Podolak, R.H., P.H. Elliott, **B.J. Taylor**, A.H. Khurana, & D.G. Black. 2009. Destruction of *Alicyclobacillus acidoterrestris* spores in apple juice on stainless steel surfaces by chemical disinfectants. *Journal of Food Protection*. Vol. 72, 510–514.
4. Khurana, A.H., G.C. Awuah, E.R. Enache, & **B.J. Taylor**. (2006). Efficacy of select acidulants in pureed green beans inoculated with *Escherichia coli* O157:H7, *Salmonella*, and *Listeria monocytogenes*. *Journal of Food Protection*. Vol. 69, 1865-1869.
5. Bunch, T.D., R.C. Evans, S. Wang, C.P. Brennand, D.R. Whittier & **B.J. Taylor**. (2004). Lamb growth rates, feed efficiency, carcass evaluation, cholesterol level and sensory evaluation of various hair x wool sheep crosses. *Small Ruminant Research*. Vol. 52, 239-245.
6. **Taylor, B.J.** & M.K. Walsh. (2002). Development and sensory analysis of a textured whey protein meatless patty. *Journal of Food Science*. Vol. 67(4), 1555-1558.

TECHNICAL AND INVITED PRESENTATIONS:

Mentored BYU student authors/presenters designated in blue bolded text

Oral Presentation at Symposium: "One Size Does Not Fit All: Advancing Surrogate Science & Collaboration to Enable Pathogen Reduction Technologies in a Variety of Matrices." Title: "Thermal Death Time Research on Surrogate Organisms in Low-Water Activity Foods and Ingredients" **B. Taylor**. 2021 Annual Meeting of the International Association for Food Protection. Phoenix, AZ.

Oral Presentation: "Microbial Production of Rare Sugars from Waste Lactose" **M. Moss**, **B. Taylor**, J. Griffiths. 2020 Intermountain Branch Meeting of the American Society for Microbiology. Ogden, UT.

Poster Presentation: "Heat Resistance of Foodborne Pathogens and Surrogates of Interest in Raw Wheat Flour" **B. Taylor**, **A. Quinn**, **R. Liao**, **K. Gowans**, **T. Smith**, F. Steele. 2020 Annual Meeting of the International Association for Food Protection [virtual due to COVID-19 global pandemic].

Poster Presentation: "Blend Uniformity and Vitamin Stability in Dairy-Based Foods Fortified with Lipid-Encapsulated Ferrous Sulfate" **G. Lee**, **R. Liao**, O. Pike, M. Dunn, D. Eggett, R. Domike, and **B. Taylor**. 2020 Annual Meeting of the International Association for Food Protection [virtual due to COVID-19 global pandemic].

Poster Presentation: "Detection of Food Adulterants Using Multispectral Imaging" B. Carter and **B. Taylor**. 2020 Annual Meeting of the International Association for Food Protection [virtual due to COVID-19 global pandemic].

Oral Presentation: "Food Safety and Preservation Best Practices: an overview of processing technologies" **B. Taylor**, **A. Quinn**, F. Steele and K. Mashlai. 2019 Train-the-Trainer Food Safety Series - Latter-day Saint Charities Mongolia. Provo, UT and Ulaanbaatar, MONGOLIA.

Poster Presentation: "*Listeria monocytogenes* in Low-Moisture Foods" **B. Taylor**, **A. Quinn**, and A. Kataoka. 2019 International Symposium on Problems of Listeria and Listeriosis (ISOPOL). Toronto, CANADA.

Poster Presentation: "Particle Size Analysis for Detecting Crystalline Solids in Powder Infant Formula" **B. Taylor**, **R. Liao**, and **G. Lee**. 2019 Annual Meeting of the International Association for Food Protection. Louisville, KY.

Poster Presentation: "Sporeformer Presence in a Milk Fractionation Process" **K. Gowans**, **R. Larsen**, **T. Lin**, **J. Arbon**, **G. Clark**, F. Steele, and **B. Taylor**. 2019 Annual Meeting of the International Association for Food Protection. Louisville, KY.

Invited Oral Presentation: "Solid State Properties and Microbiology of Low-Moisture Foods" **B.J. Taylor**. May 2018 BUILD Dairy Annual Meeting, Corvallis, OR.

Oral Presentation: "*Cronobacter sakazakii* Genes Contributing to Persistence in Low-Moisture Dairy Matrices" **K. Hartmann**, **B. Taylor**, J. Griffiths, F. Steele. 2018 Intermountain, Rio Grande, and Rocky Mountain TriBranch American Society for Microbiology Meeting. Durango, CO.

Poster Presentation: "Thermal Resistance of *Listeria monocytogenes* in Low-Moisture Foods (LMF) using a Dry Inoculation Procedure" A. Kataoka, **B. Taylor**, E. Enache, R. Podolak and **A. Quinn**. 2018 Annual Meeting of the International Association for Food Protection. Salt Lake City, UT.

Poster Presentation: "Effect of Relative Humidity on Water Activity Determination of a Low-Moisture Infant Formula Powder" J.E. Ortiz, L.N. Wisener, R.P. Batema, **B.J. Taylor**. 2009 Annual Meeting of the Institute of Food Technologists, Anaheim, CA.

Invited Oral Presentation: "Becoming a Technical Leader in the Food Industry" **B.J. Taylor**. October 2008 Regional IFT meeting, West Lafayette, IN.

Invited Panelist: "Global Challenges of Delivering Safe and Nutritious Food" 2008 National Center for Food Safety & Technology Annual Meeting. Oak Brook, IL.

Invited Oral Presentation: "Real Time Detection of Microbes to Improve Food Safety" B.C. Weimer, P. Desai, M.K. Walsh, **B.J. Taylor**, and G. Rompato. 2008 International Food Safety Conference, Beijing, China.

Poster Presentation: "Destruction of *Alicyclobacillus acidoterrestris* Spores in Apple Juice on Stainless Steel Surfaces by Chemical Disinfectants" R.H. Podolak, P.H. Elliott, **B.J. Taylor** and A.H. Khurana. 2008 Food Safety Summit, Washington D.C.

Invited Oral Presentation: “Experiences with Existing Food Safety and Public Health Training & Education Programs” **B.J. Taylor**. 2005 Food Safety Institute of the Americas, Miami, FL.

Poster Presentation: “*Escherichia coli* O157:H7 Capture with GM1 Containing Liposomes Verified by Surface ELISA” **B.J. Taylor**, M.K. Walsh, and B.C. Weimer. 2003 Annual Meeting of the Institute of Food Technologists, Chicago, IL.

Poster Presentation: “Sensory Analysis of Whey Protein Patties” **B.J. Taylor** and M.K. Walsh. 2001 Annual Meeting of the Institute of Food Technologists, New Orleans, LA.

BOOK CHAPTER:

Gravani, R.B., L.M. Weddig, **B.J. Taylor**, and D.T. Bernard. “HACCP Training.” HACCP A Systematic Approach to Food Safety. A Comprehensive Manual for Developing and Implementing a Hazard Analysis and Critical Control Point Plan. 4th Ed. Food Products Association. Washington D.C. 2006. 121-124.

INVITED REVIEW OF INDUSTRY GUIDANCE:

Controlling Pathogens in Dairy Processing Environments - Guidance for the U.S. Dairy Industry. US Dairy Council Food Safety Team. Issued: October 1, 2019. 100 pages.

TRADE ASSOCIATION PUBLICATION REVIEW COMMITTEES:

GMA Canned Foods: Principles of Thermal Process Control, Acidification and Container Closure Evaluation, 7th Edition, 2007. Print. ISBN 978-0-937774-58-8.

GMA HACCP Manual: A Systematic Approach to Food Safety, 4th Edition, 2006. Print. ISBN 0-9785977-0-2.

PRESS RELEASES AND MEDIA:

Feeding the Land of the Eternal Blue Sky. BYU Life Sciences Magazine. June 29, 2020. <https://lifesciences.byu.edu/magazine/feeding-the-land-of-the-eternal-blue-sky>

Innovation Center for U.S. Dairy Releases Expanded Guidance on Pathogen Control. Food Safety Magazine and Perishable News, December 10, 2019. <https://www.foodsafetymagazine.com/news/innovation-center-for-us-dairy-releases-expanded-guidance-on-pathogen-control/>
<https://www.perishablenews.com/dairy/innovation-center-for-u-s-dairy-releases-expanded-guidance-on-pathogen-control/>

Teachers from Khovd Khugjil Polytechnic College (in Western Mongolia) gain further experience from their recent visit in the United States of America, Sign agreement to work collaboratively to improve food safety and preservation in region. Олон Ястны Телевиз HD (television). Originally aired Aug. 30, 2019.

How a unique partnership with BYU and Latter-day Saint Charities is changing lives in Mongolia. Church News, a Deseret News Publishing Company. August 22, 2019. <https://www.thechurchnews.com/global/2019-08-22/how-a-unique-partnership-with-byu-and-latter-day-saint-charities-is-changing-lives-in-mongolia-157303>

The Romaine Lettuce Recall. Top of Mind with Julie Rose. KBYU Radio. A live in-studio expert interview. Originally aired December 18, 2018. <https://www.byuradio.org/episode/d0796f97-4947-41c8-9689-07b1b46a7551?playhead=1086&autoplay=true>

BYU students invent carbonated ice cream — combining two of Utah's favorites into one. Daily Herald. September 2018. https://www.heraldextra.com/news/local/education/college/byu/byu-students-invent-carbonated-ice-cream-combining-two-of-utah/article_8238941e-48cb-5ae3-b538-fbc63b964794.html

Students scoop \$10,000 for carbonated ice cream. Daily Universe. September 2018. <https://universe.byu.edu/2018/09/18/byu-students-develop-carbonated-ice-cream-1/>

Pediatric Science Galleries Provide Glimpse into Research, Discoveries. 2014. <http://www.meadjohnson.com/journal/pediatric-science-galleries-provide-glimpse-research-discoveries>

New Study Compares Nutramigen® LGG® Infant Formula to Other Infant Formulas for Cow's Milk Allergy. 2013. <http://www.meadjohnson.com/journal/new-study-compares-nutramigen%C2%AE-lgg%C2%AE-infant-formula-other-infant-formulas-cow%E2%80%99s-milk-allergy>

New Journal of Pediatrics Study Shows Strong Benefits Provided by Nutramigen® LGG® Infant Formula in the Management of Cow's Milk Allergy. 2013. <http://www.meadjohnson.com/news/press-releases/new-journal-pediatrics-study-shows-strong-benefits-provided-nutramigen%C2%AE-lgg%C2%AE>

Pediatrics Publishes Study on Benefits and Safety of Mead Johnson's Enfamil® Human Milk Fortifier Acidified Liquid. 2012. <http://www.meadjohnson.com/journal/pediatrics-publishes-study-benefits-and-safety-mead-johnson%E2%80%99s-enfamil%C2%AE-human-milk-fortifier>

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