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Appendix

Peer reviewed publications

Publications included in this thesis

- Dumpler J, Kulozik U (2015) Heat stability of concentrated skim milk as a function of heating time and temperature on a laboratory scale – Improved methodology and kinetic relationship. *Int Dairy J* 49:111–117. [doi:10.1016/j.idairyj.2015.05.005](https://doi.org/10.1016/j.idairyj.2015.05.005)
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- Dumpler J, Dörle M-Th, Kulozik U (2017) Implication of pH and soluble calcium on micelle size and dissociation of κ -casein in relation to heat stability of micellar casein. *LWT-Food Sci Technol* **submitted**

Publications not included in this thesis

- Kirchner B, Pfaffl MW, Dumpler J, von Mutius E, Ege MJ (2016) microRNA in native and processed cow's milk and its implication for the farm milk effect on asthma. *J Allergy Clin Immunol*, 137:1893-1895. [doi:10.1016/j.jaci.2015.10.028](https://doi.org/10.1016/j.jaci.2015.10.028)

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Non reviewed publications

- Dumpler J, Marx M (2012) Energieeinsparung durch haltbare Milch- und Molkekonzentrate. Jahresbericht 2012 der milchwissenschaftlichen Forschungseinheiten am ZIEL, Technische Universität München, pp. 100-102
- Dumpler J (2013) Einfluss des Trockenmassegehaltes von Umkehrosomose-Magermilch-konzentraten auf funktionelle Qualitätskriterien. Jahresbericht 2013 der milchwissenschaftlichen Forschungseinheiten am ZIEL, Technische Universität München, pp. 86-88
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- Dumpler J, Marx M, Kulozik U, Depping V, Stefánsdóttir B, Grunow, M (2017) Ökonomisch und ökologisch sinnvoll – Ressourcenschonende Produktion von Milch- und Molkekonzentraten. *Lebensmitteltechnik* 49(3):40-41.

Oral presentations¹²

- Dumpler J, Kulozik U (2012). Grundlagen und Mechanismen der Strukturbildung bei der Gelbildung durch Proteine und Hydrokolloide. Technologieseminar 2012 - Verfahrens- und Strukturoptimierung in der Lebensmittelherstellung, Freising/Weihenstephan, October 25-26
- Dumpler J, Kulozik U (2013) Heat stability of concentrated skim milk as a function of pH. Dairy Conference 2013, Universität Hohenheim/Stuttgart, September 16-17
- Marx M, Dumpler J, Kulozik U (2013) Neue Erkenntnisse zur Erhitzung und Stabilität von Milch- und Molkenkonzentraten. Milchwissenschaftliche Herbsttagung, Freising/Weihenstephan, October 10-11
- Dumpler J, Kulozik U (2014) Kristallisation von Calciumphosphat aus Ultrafiltrationspermeaten. Jahrestreffen der ProcessNet-Fachgruppen Lebensmittelverfahrenstechnik und Phytoextrakte, TU München, Freising/Weihenstephan, February 26-28
- Dumpler J, Kulozik U (2014) „Quo vadis Magermilchkonzentrat?“ Lösungsansätze für (ultra)hocherhitzbare Magermilchkonzentrate hoher Trockenmasse. Milchwissenschaftliche Herbsttagung, Freising/Weihenstephan, October 9-11
- Kulozik U, Marx M, Dumpler J (2014) Neue ressourcen- und energiesparende Prozesse zur Herstellung, Vertrieb/Logistik und Einsatz von Milch- und Molkekonzentraten als Ersatz für Milch- und Molkepulver. BLE Innovationstage 2014 - Neue Ideen für den Markt, Bonn, October 15-16
- Dumpler J, Kulozik U (2015) Kinetic description of UHT induced aggregation in milk concentrates - Comparison of direct steam injection and lab scale indirect heating. ICEF 12 - International Congress on Engineering and Food, Québec City, Canada, June 14-18
- Heidebrecht HJ, Hartinger M, Dumpler J, Kulozik U (2015) Assessment of polymeric spiral-wound membranes for milk protein fractionation, Euromembrane, Aachen, September 6-10
- Dumpler J, Kulozik U (2015) Novel technologies for skim milk concentrates. 1. Chemical and physical means to prevent heat-induced aggregation of casein micelles in concentrated skim milk. Seminar on Emerging Dairy Technologies, Freising/Weihenstephan, September 16-18
- Dumpler J, Kulozik U (2015) Novel technologies for skim milk concentrates. 2. Energy saving by thermal preservation and shelf life of concentrated skim milk as an alternative to drying. Seminar on Emerging Dairy Technologies, Freising/Weihenstephan, September 16-18

¹² The presenting author(s) is (are) underlined.

- Dumpler J, Kulozik U (2015) Reaction kinetics of heat-induced aggregation in skim milk concentrates - Comparison of lab scale indirect heating and direct steam injection. 9th NIZO Dairy Conference, Papendal, The Netherlands, September 30-October 2
- Dumpler J, Kulozik U (2016) Reaction kinetics of heat-induced aggregation in skim milk concentrates - Comparison of lab scale indirect heating and direct steam injection. IDF Parallel Symposia. Dairy Products Concentration and Drying, Dublin, Ireland, April 11 – 14
- Dumpler J, Marx M, Kulozik U, Depping V, Stefánsdóttir B, Grunow M (2016) Ressourcenschonende Produktion von Milcherzeugnissen am Beispiel von Milch- und Molkenkonzentrat. Tag der Studienfakultät Brau- und Lebensmitteltechnologie. Freising/Weihenstephan, June 24
- Dumpler J, Kulozik U (2016) Milk concentrates as alternative to powder manufacture – Technical solutions for preservation with reduced economic and environmental impact. Seminar on Emerging Dairy Technologies, Freising/Weihenstephan, September 14-16
- Dumpler J, Kulozik U (2016) Diafiltration and heat treatment of micellar casein concentrates – Factors affecting filtration performance and heat stability. Seminar on Emerging Dairy Technologies, Freising/Weihenstephan, September 14-16
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- Dumpler J, Marx M, Kulozik U, Depping V, Stefánsdóttir B, Grunow M (2016) Milk and whey concentrates vs. dairy powders – Opportunities and challenges towards a reduced environmental impact of dairy processing. 30th EFFoST International Conference. Vienna, Austria, November 28-30

Poster presentations¹³

- Dumpler J, Kulozik U (2014) Changes in the composition of milk serum and its influence on heat stability of concentrated milk. 15th Food Colloids Conference, Karlsruhe, April 13-16
- Heidebrecht HJ, Dumpler J, Kulozik U (2015) Thermal stability of bovine immunoglobulins during processing - Kinetic considerations. ICEF 12 - International Congress on Engineering and Foods, Québec, Canada, June 14-18

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