

## **SAFETY AND STABILITY OF PLANT-BASED MILK – CAN PREDICTIVE MICROBIOLOGY HELP?**

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Plant-based milk has become an important commodity for the health-conscious segment of consumers. While its health-benefits are widely documented, much less is known about its microbiology, from either safety or spoilage point of view.

Predictive food microbiology was born in the '80-s for the very objective to draw predictions from microbiological experiments in laboratory media to bacterial kinetics in food environment. While it has been proven to be practical and useful for wide range of food products, among them bovine milk and infant formulae, it does need at least some experiments relevant to the specific food in question which allows its results to be extrapolated to new areas.

In this talk, we summarize what data are available for this research and how we could integrate them into a database with well-defined ontology. A properly set-up database is key to find patterns in the data and to draw conclusions and predictions. It also helps to find gaps and fill them with new laboratory observations. Predictive modelling and computational means will be decisive for a scientifically proper exploration of the issue with the microbiology of plant-based milk.