## research&innovation

## More safe Mediterranean foods







A sophisticated software will help companies to ensure the safety of artisan food products









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ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA DIPARTIMENTO DI SCIENZE E TECNOLOGIE limited dimensions, are not able to produce such in-depth research on their own." A prototype of a decision-making tool designed for managing the safety of artisan food products, "which will be based on real flow diagrams, on data collection in field and pilot productions, on predictive and risk analysis models, built and implemented on products se-

lected during the project."

he production of artisan fermented meats and dairy products in the Mediterranean area is not always achieved by optimized processes (e.g. too short fermentations). Furthermore, artisan fermented foods are often consumed without cooking and handled in hygienic conditions that are not always ideal. All these factors contribute to the microbiological instability of such products, potentially responsible for food poisoning and the related costs for the community and for the companies (expenses to withdraw from the market and destroy the lots of products at risk). This is the theme faced by the European project ArtiSaneFood, initiated a few months ago and coordinated by the Portuguese University of Braganza, together with partners from Spain, France, Greece, Morocco, Tunisia and the United States. Among them, the only Italian partner is the Department of Agro-Food Sciences and Technologies of the University of Bologna (DISTAL),

which is specifically involved in the collection of field data - starting from products of animal origin, like cheeses and sausages - and modelling of microorganisms, as indicators of the levels of hygiene and pathogens. In particular, primary and secondary mathematical models will be exploited with the purpose to predict the growth of potentially harmful bacteria, depending on the intrinsic properties of the product and on process variables. The developed models will be utilized to evaluate the dynamic data collected and to predict the parameters necessary to comply with international safety specifications and standards. "The fundamental goal is to generate mathematical models able to estimate the shelf life of the products - Professor Gerardo Manfreda, project manager for DISTAL, emphasizes -. Furthermore, we are going to create a user-friendly software, making it suitable for several small and medium-sized companies in the Mediterranean area that, owing to their



SAUSAGES



DAIRY PRODUCTS



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