

# 4th FOOD CHEMISTRY Conference

## INFLUENCE OF APPLICATION METHODS OF A WHEY PROTEIN-BASED COATING WITH CARDOON EXTRACT ON CURED CHEESE PROPERTIES

Cássia H. Barbosa<sup>1,2,\*</sup>, Mariana A. Andrade<sup>1,3</sup>, Sidney Tomé<sup>1</sup>, Fernanda Vilarinho<sup>1</sup>, Ana Luísa Fernando<sup>2</sup>, Ana Sanches Silva<sup>4,5,6</sup>

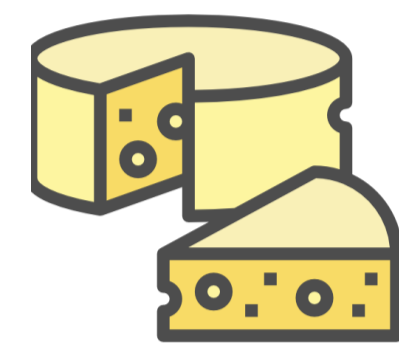
<sup>1</sup> Departamento de Alimentação e Nutrição, Instituto Nacional de Saúde Doutor Ricardo Jorge, Av. Padre Cruz, 1649-016 Lisboa, Portugal; <sup>2</sup> METRICS, Departamento de Química, NOVA School of Science and Technology, Universidade NOVA de Lisboa, Campus de Caparica, 2829-516 Caparica, Portugal; <sup>3</sup> Universidade de Coimbra, Faculdade de Farmácia, Coimbra, Azinhaga de Santa Comba, 3000-548 Coimbra, Portugal; <sup>4</sup> REQUIMTE/LAQV, Rua D. Manuel II, Apartado 55142, Porto, Portugal; <sup>5</sup> Centro de Estudos de Ciências Animal (CECA), ICETA, Universidade do Porto, Porto, Portugal. <sup>6</sup> Associate Laboratory for Animal and Veterinary Sciences (AL4AnimalS), 1300-477 Lisboa, Portugal; \*[cassia.barbosa@insa.min-saude.pt](mailto:cassia.barbosa@insa.min-saude.pt)



### INTRODUCTION

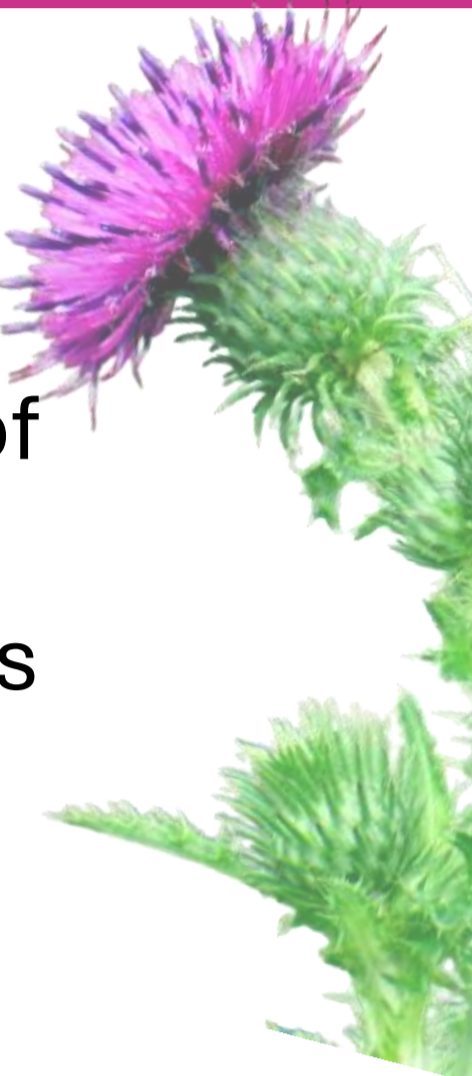
#### Cheese Preservation

- Edible coatings are increasingly applied for cheese preservation.
- Can reduce moisture loss, lipid oxidation, and microbial contamination.
- Whey protein-based coatings are biodegradable, transparent, and good carriers for bioactive compounds.



#### *Cynara cardunculus* L. (Cardoon)

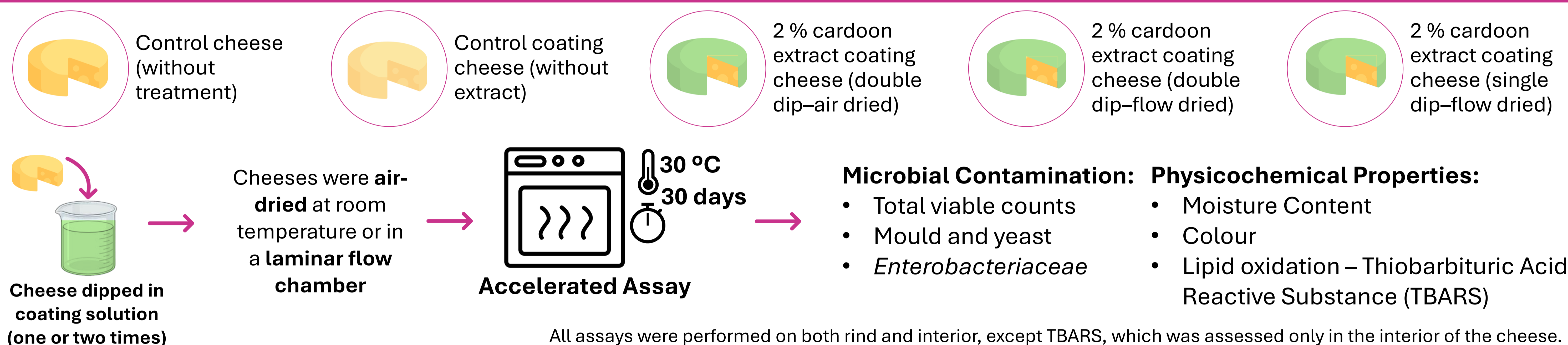
- Native to the Mediterranean region
- Is a multipurpose crop (e.g. food ingredient and biomass)
- Its flowers are used as milk clotting in the production of some cheeses
- Leaves are the main by-product and is rich in polyphenols with antioxidant and antimicrobial potential.



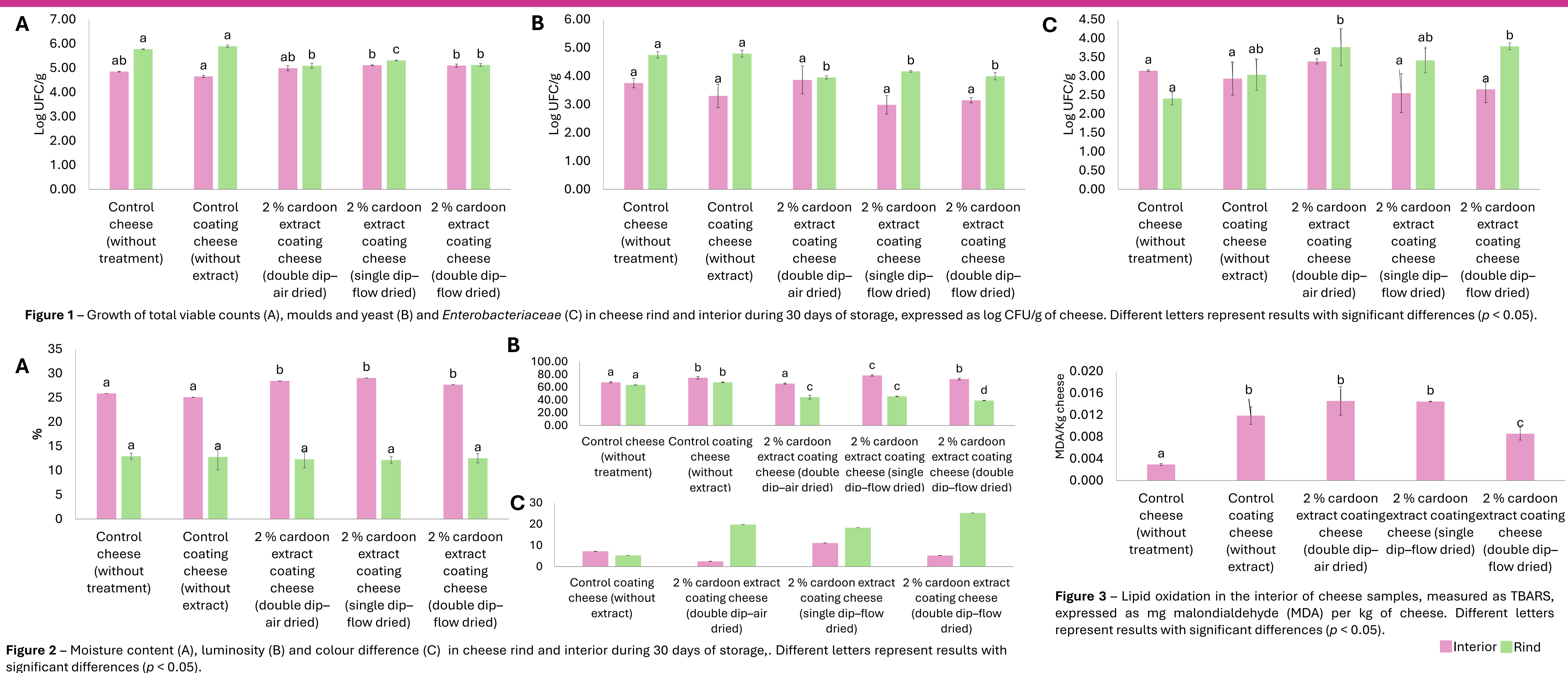
**Aim:** evaluation of different methods of applying a whey protein-based coating incorporated with 2.0 % (w/v) cardoon leaf extract on cured cheese to extend its shelf life.

Barbosa et al. *Foods* 2020, 9, 564

### MATERIALS & METHODS



### RESULTS & DISCUSSION



### CONCLUSIONS

Whey protein-based coatings with 2% cardoon leaf extract (double dip–flow dried) effectively reduced microbial contamination and lipid oxidation, while maintaining cheese moisture. This natural strategy enhances shelf life and quality, offering a sustainable approach to cheese preservation.

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