



Developing innovative formulations using plant and dairy protein-based ingredients



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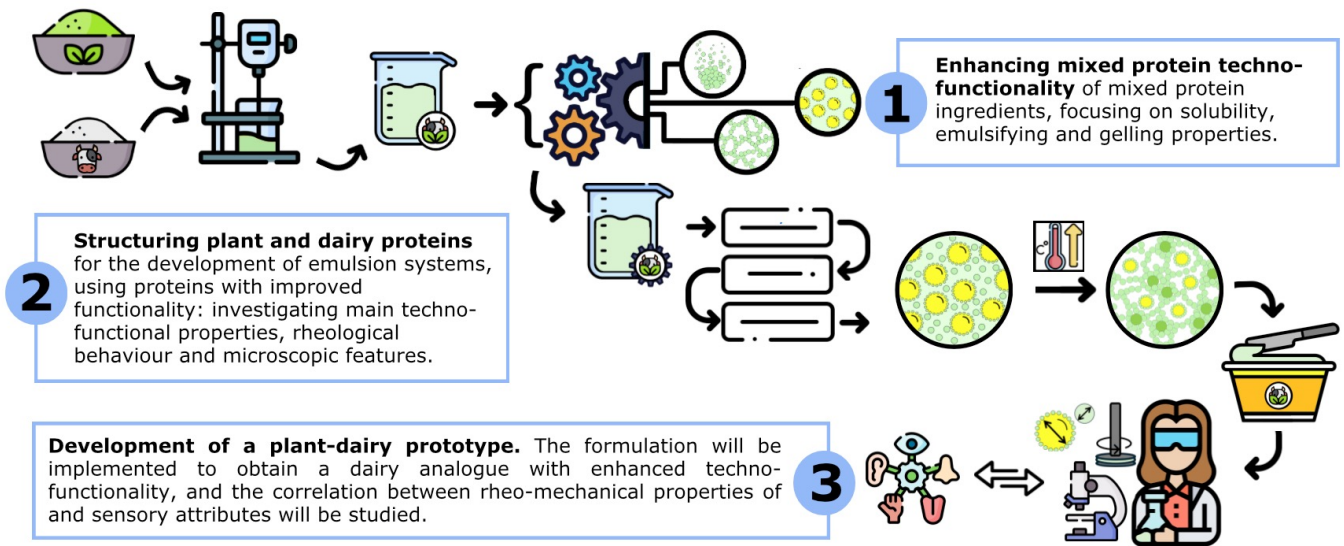


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STATE OF THE ART: In the context of a rapidly growing food industry, consumer demand for innovative protein-enriched products is on the rise [1]. The gap that such growing demand is creating could be filled by alternative protein sources as plant proteins, which appear to be promising as a more environment-friendly option compared to the sole use of animal protein sources [2]. Among these, pulses play an important role for their affordability and high protein content, even if the use of sole plant proteins in several formulations is limited by their less effective functional properties (i.e., limited solubility) and their pronounced flavour, that can negatively affect sensorial attributes of food products [3,4]. Therefore, even if substituting dairy proteins with plant proteins is challenging, partial replacement could still be considered as a viable option.

AIM: Developing an innovative dairy alternative by investigating and enhancing the techno-functionality of mixed protein systems.

EXPERIMENTAL PLAN



GANTT CHART

Activity	Months											
	2	4	6	8	10	12	14	16	18	20	22	24
A1) Enhancing mixed protein techno-functionality				M								
1) Solubility enhancement												
2) Gelling and emulsifying properties enhancement												
A2) Structuring plant and dairy proteins								M				
1) Techno-functional properties of the emulsions systems												
2) System's microstructure												
A3) Prototype formulation											M	
A4) Thesis and paper preparation												
1) Bibliographic research												
2) Writing and editing												

A: activity; M: milestone

REFERENCES

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