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GHI (Global Harmonisation Initiative)
ISBN: 978-3-200-10437-2

The preliminary results show remarkable differences in hazard identification. For literature case #1 (ice cream), the LLM showed high compliance for microbiological hazards (75%), but significantly lower compliance for chemical (21%) and physical hazards (16%). For literature case #2 (cake production), compliance varied with 50% for physical hazards and 38% and 11% for microbiological and chemical hazards, respectively. Critical control point analysis showed compliance rates of 78.6% for case 1 and 85.7% for case 2.

The preliminary analysis reveals important methodological differences between the LLM and the scientific literature. The LLM provided a more comprehensive identification of hazards and preventive measures, taking a broader perspective, while the literature offered a more specific and focussed approach. These observations highlight the potential of LLMs to improve food safety assessment, while emphasising the importance of refining their focus to bring them in line with established industry practises.

#626 JOSÉ ANGEL PÉREZ-ALVAREZ: PONCE-MARTÍNEZ, A.J.[1]; LUCAS-GONZÁLEZ, R. [1]; VIUDA-MARTOS, M. [1]; FERNÁNDEZ-LÓPEZ, J. [1]; PÉREZ-ALVAREZ, J.A.[1]: ARE DATE-PALM FRUIT AND QUINOA CO-PRODUCTS TECHNOLOGICALLY SUITABLE TO PRODUCE HEALTHY DAIRY DESSERTS

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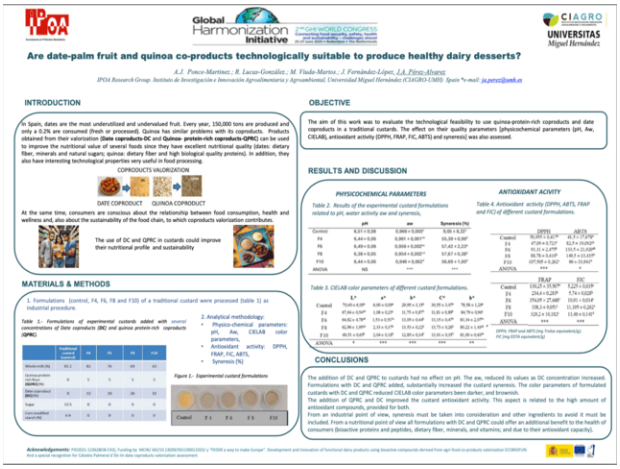

Spanish palm groves produce more than 150,000 tons/year of edible dates, but only a 0,2% of them, are consumed thus, is the most underutilized and underused crop. Also, Spanish quinoa producers have similar problem with their protein-rich “wastes” (QPRC). Thus, valorization of both “wastes” could be an excellent resource of value-added products. At the same time, consumers are conscious about the relationship between food consumption, health and wellness and, and are aware to the relationship between the agro-industrial coproducts valorization and environmental benefits. With the use of both coproducts, the custards nutritional profile could be improved.

The aim of this work was to evaluate the technological feasibility to use QPRC and date coproducts (DC) in a traditional custard using physicochemical parameters (pH, Aw, CIELAB), antioxidant activity (DPPH, FRAP, FIC, ABTS) and syneresis, as quality parameters.

5 different formulations of a traditional custard were elaborated, one of them without DC and QPRC (control-C), and the others, had an equal concentration of QPRC (5%) with different DC concentrations (13, 19, 26 and 32%).

The increase in DC concentration decreased Aw activity value from 0,966 (C) to 0.949 (32% DC) and syneresis increased from 9.05% (C) to 56.69% (32%DC) ($P<0,05$) resulting in a texture defect and, therefore consumers acceptance. pH was not affected ($P>0.05$) in all formulations. DC addition increased the antioxidant capacity in all assayed methods and dietary fiber ranged from 0.03 (C) to 6.41 (32% DC) the addition of 19-32% produced a dietary fiber-rich custards (>6%). The addition of QPRC improved the custards protein content. On the other hand, L*, a* and b* also decreased in QPRC and DC samples. In custards, the DC and QPRC addition is technologically feasible, and the nutritional profile were improved but, for better consumer acceptance, the syneresis must be improved. Funding PID2021-123628OB-C43 MCIN/ AEI/10.13039/501100011033/ “FEDER”.