

Exploring Extract from Chestnut By-product as Natural Preservatives in Atlantic Bonito Fish Burgers

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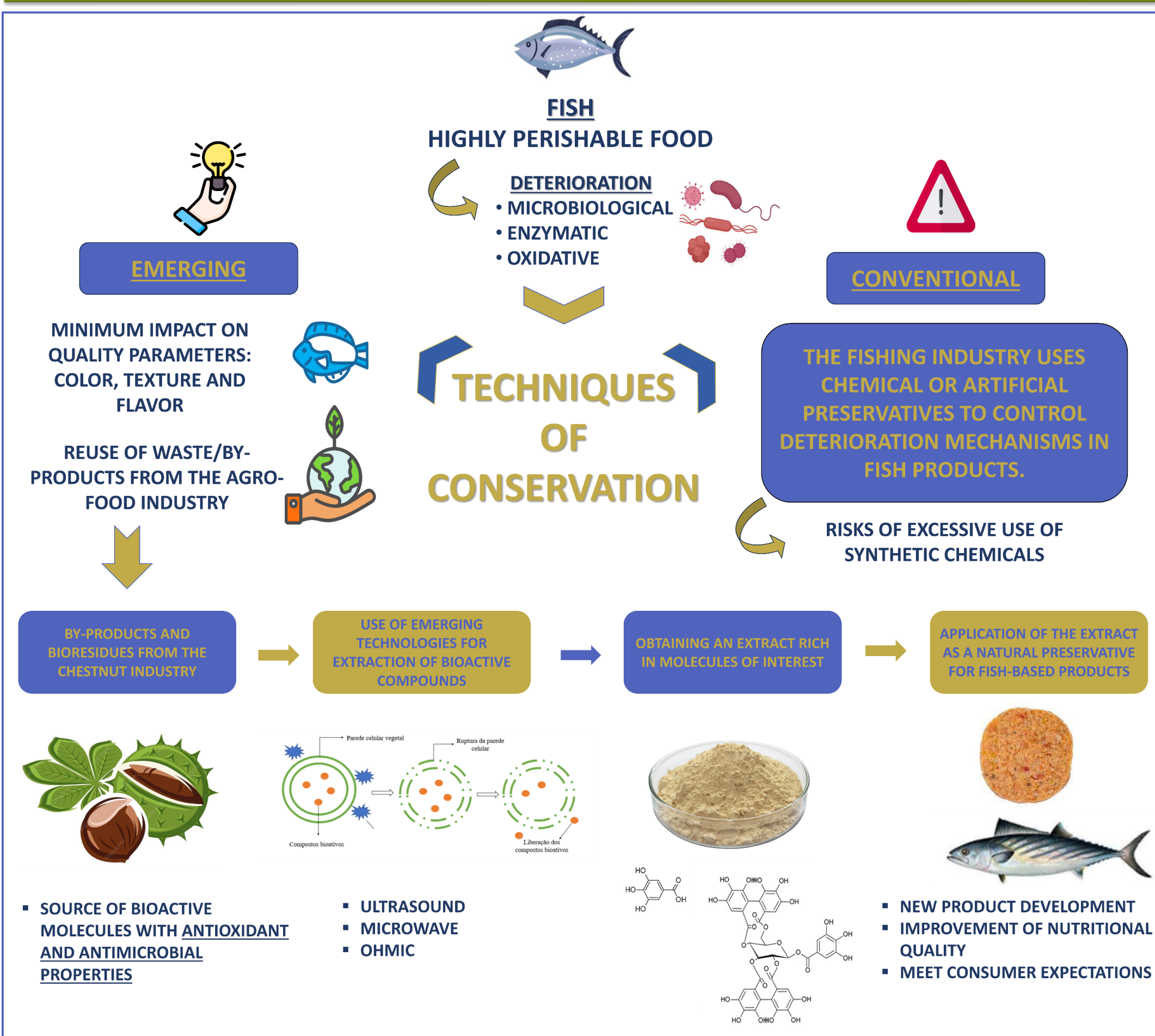
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INTRODUCTION & AIM



METHOD

Burger formulation

Atlantic Bonito (*Sarda sarda*)

4 different fish burger formulations:

- Negative control
- 0.02% Butylated hydroxytoluene (positive control)
- 0.25% of chestnut male flowers extract
- 0.5% of chestnut male flowers extract

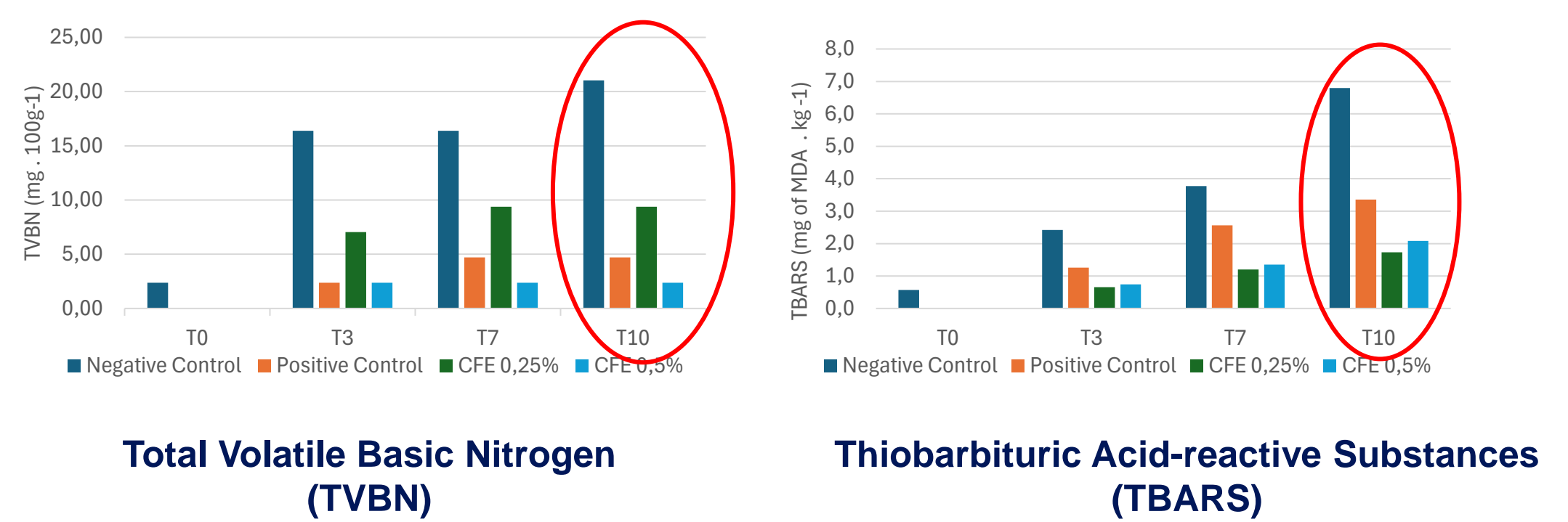


Shelf life evaluation



RESULTS & DISCUSSION

Fish Burgers Shelf life



- Initial pH levels of all formulations were around 5.90.
- By day 10, the pH of the negative control group had slightly decreased to 5.83, while the pH levels in the positive control and CFE groups remained stable.

Visual observation after 10 days of storage at refrigerated temperature



CHE rich in phenolic compounds



CONCLUSION

These results suggest that CFE could be an effective natural preservative, improving the shelf life and quality of fish burgers for a duration of 10 days in a refrigerator.

FUTURE WORK

Future research should explore the mechanisms of CFE's antioxidant effects and conduct a sensory evaluation to determine the organoleptic properties of the fish burger formulations