

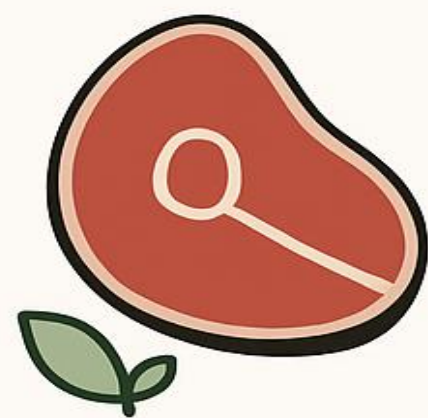
Evaluation of incorporation of red currant pomace and extract in meatballs using conventional quality assessment

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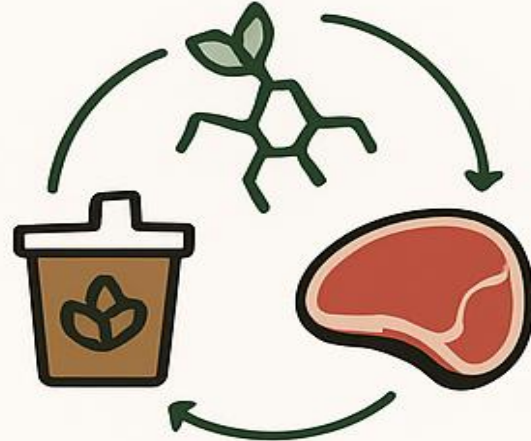
INTRODUCTION & AIM

PROBLEM



Meat provides high-quality protein essential for human nutrition, yet its production poses economic and environmental challenges

APPROACH



Integrating antioxidant phytochemicals extracted from agri-food by-products

BENEFITS



- Inhibit oxidation processes
- Reduce potentially carcinogenic compounds

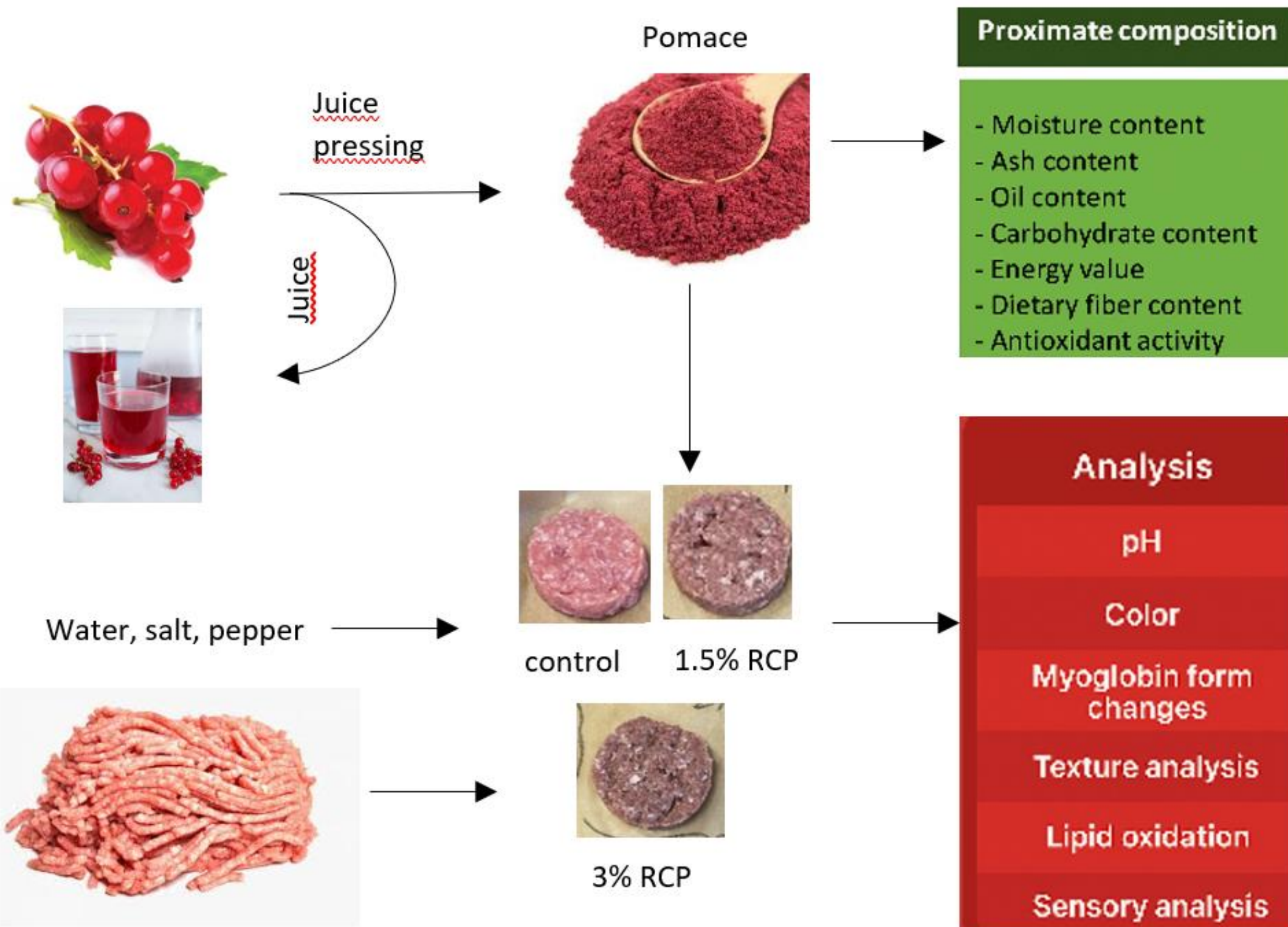


Support circular economy principles

AIM

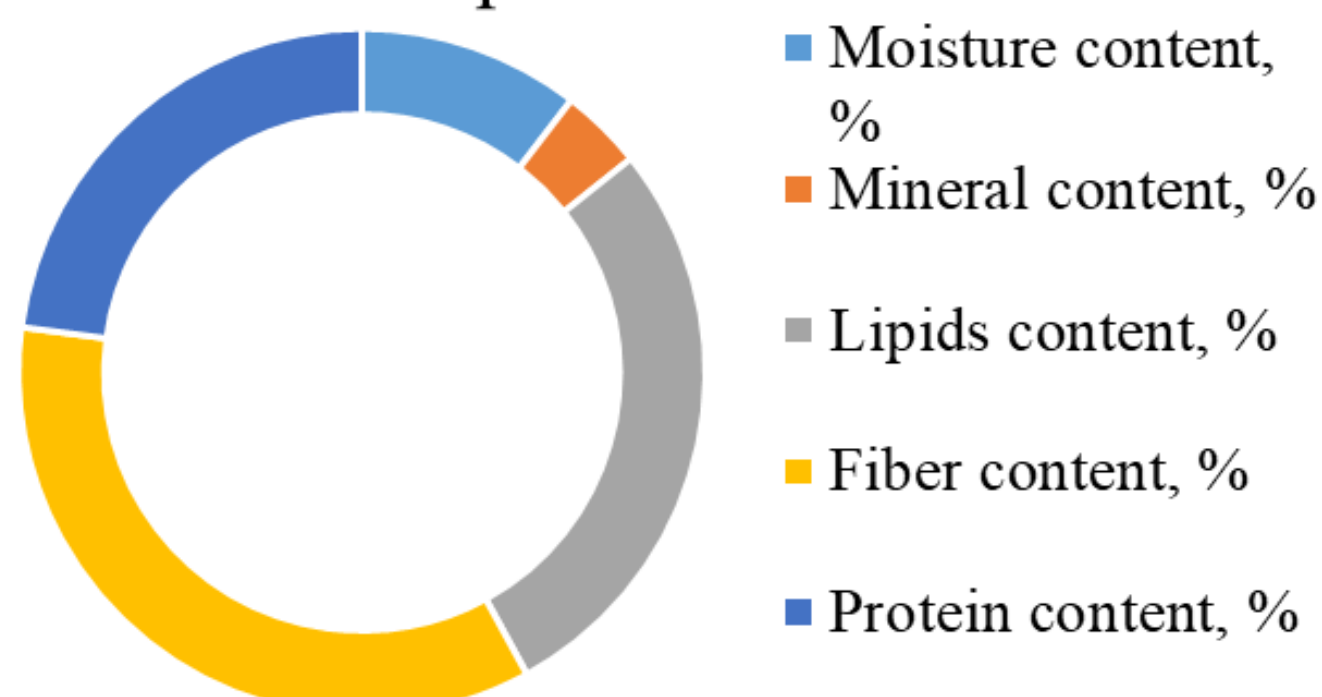
To evaluate the impact of natural additives on quality parameters and lipid oxidation stability of meat products

METHOD



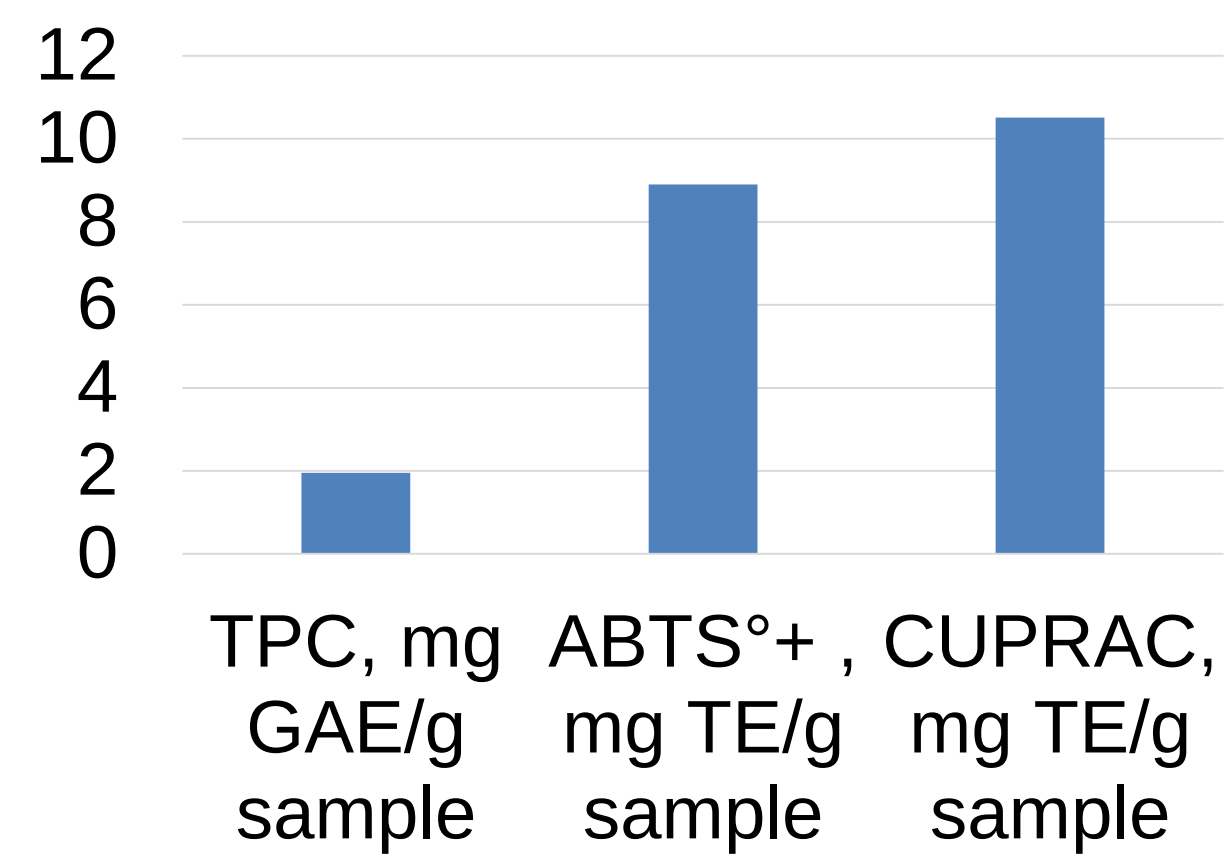
RESULTS & DISCUSSION

Red current pomace (RCP) proximate composition



RESULTS & DISCUSSION

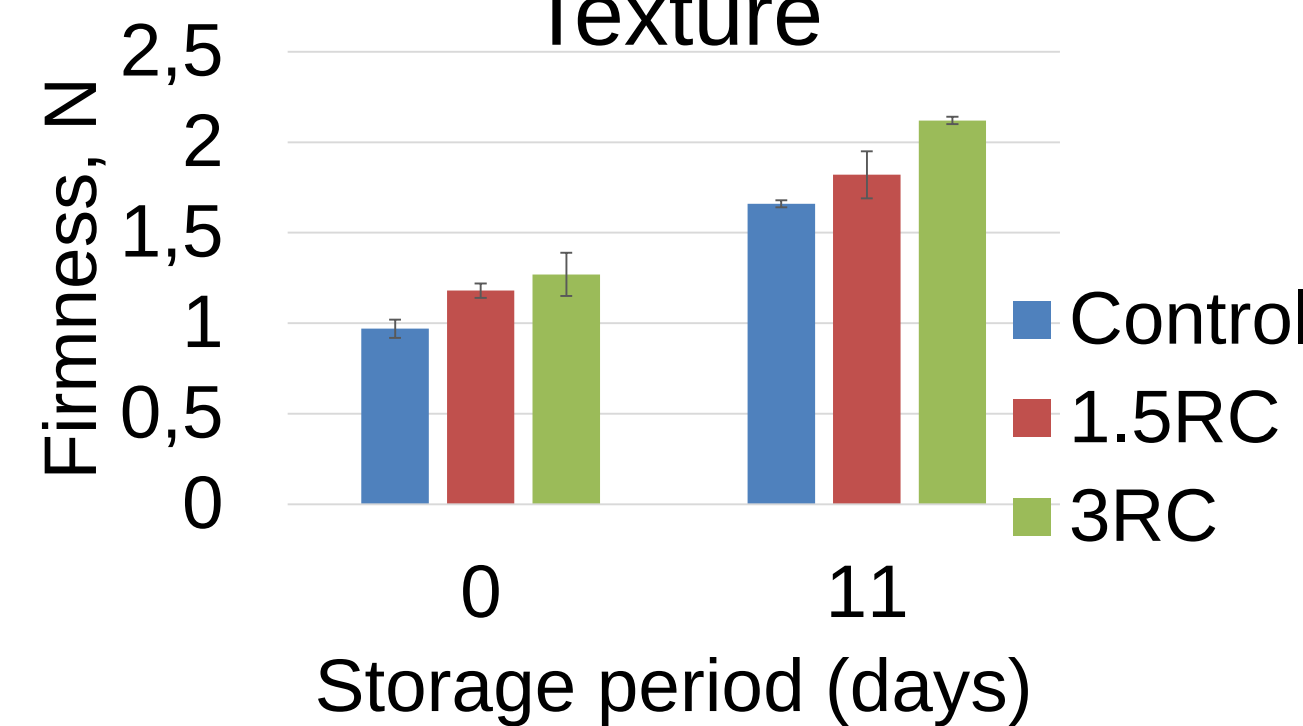
Antioxidant activity of RCP



pH: No significant differences were observed between the control sample and meatballs with 1.5% or 3% red currant pomace (RCP).

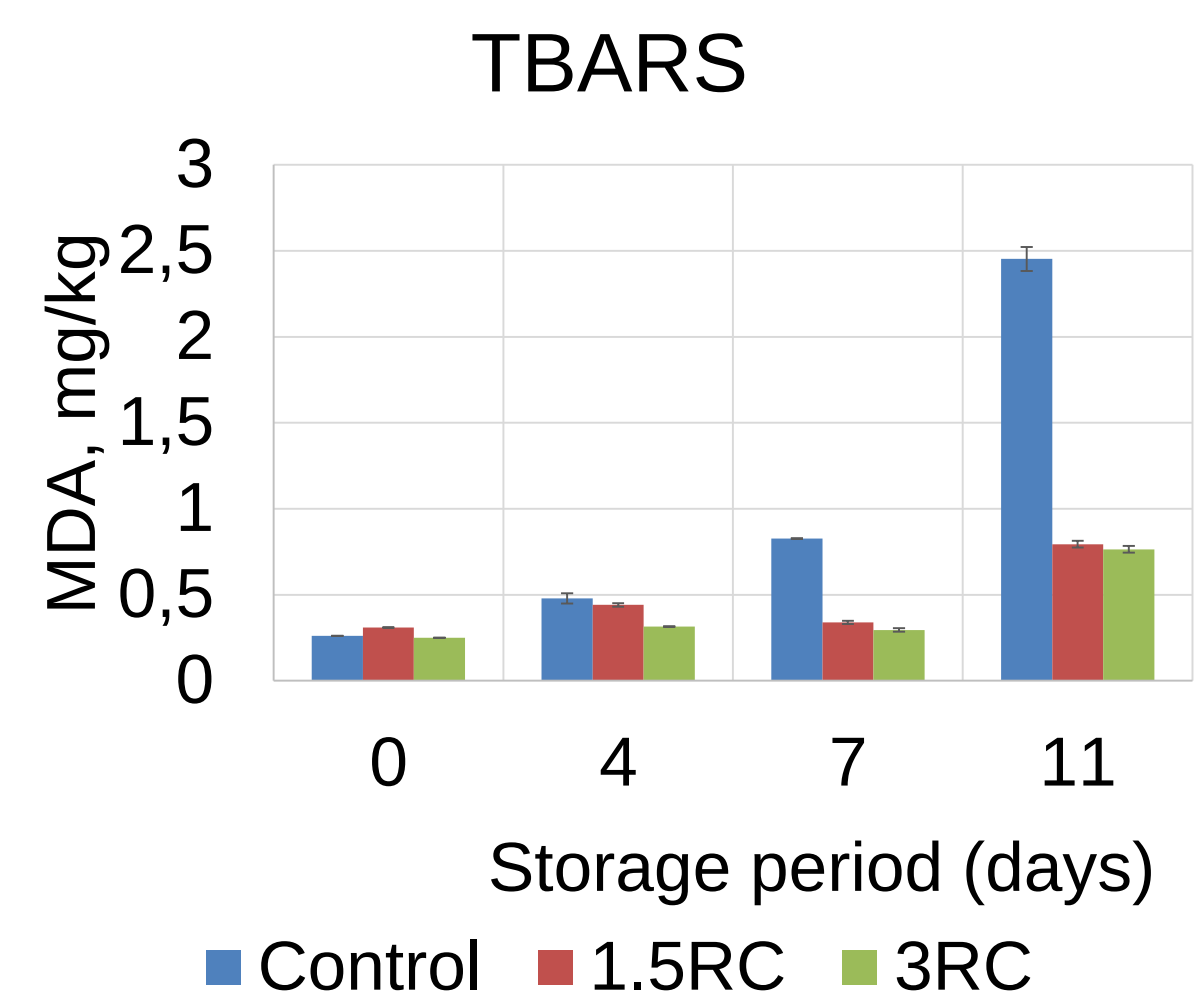
Color: Incorporation of RCP decreased L* (lightness), a* (redness), and b* (yellowness) values compared with the control.

Texture



Myoglobin forms: The proportions of myoglobin forms varied during storage, but metmyoglobin (MetMB) consistently showed the highest content.

Sensory evaluation: throughout storage, panelists consistently preferred meatballs containing 1.5% RCP.



CONCLUSION

Taken together, RCP may be considered promising antioxidant-containing and fibre-rich materials for use in pork meat products and may increase their nutritional quality due to red currants' health benefits

FUTURE WORK / REFERENCES

Further research could explore optimal incorporation levels and potential sensory impacts to maximize both health benefits and consumer acceptance.