

# The 4th International Electronic Conference on Processes



20-22 October 2025 | Online



## Preliminary evaluation of the use of grape pomace in the formulation of vegan chorizo

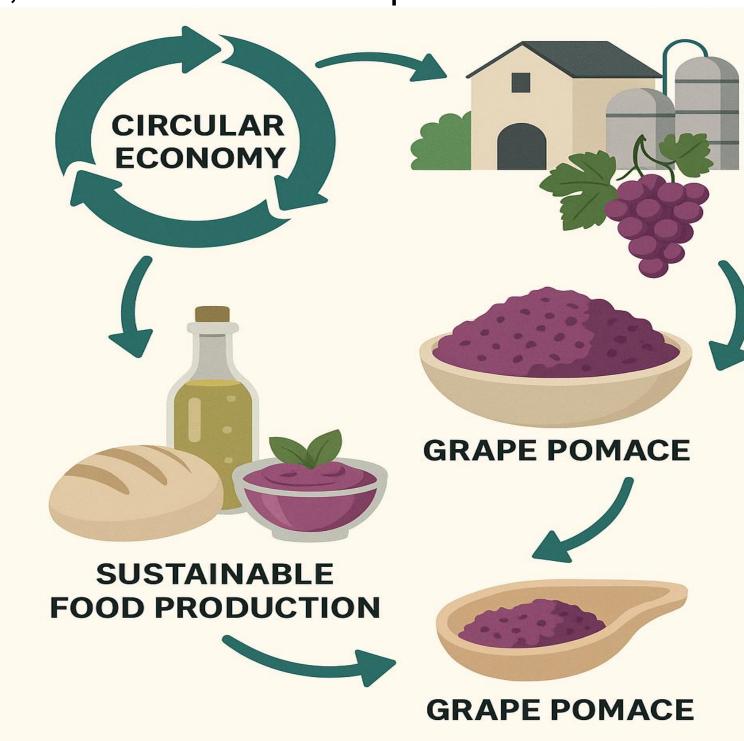
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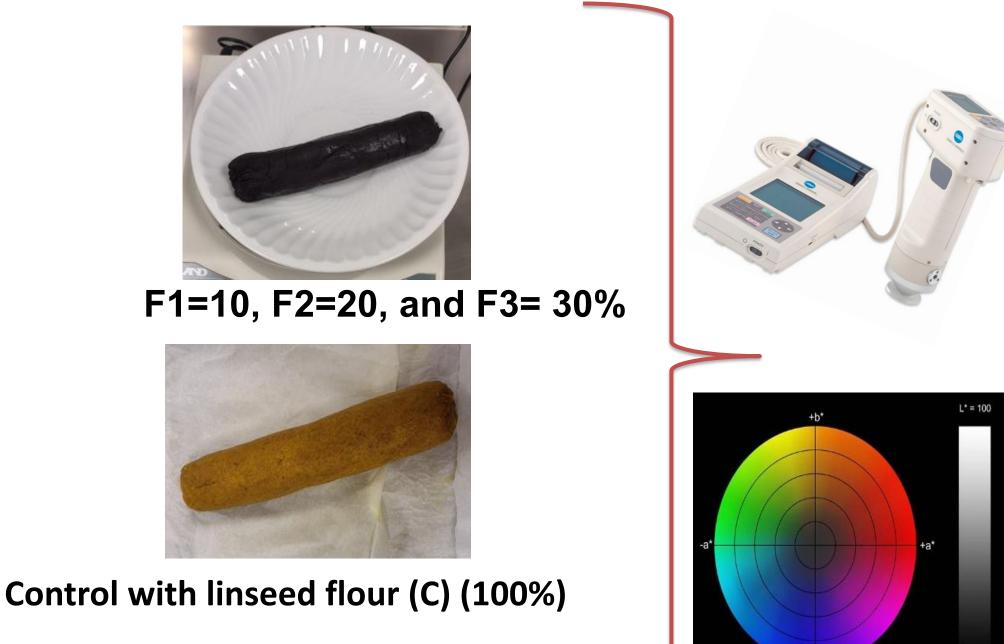
#### **INTRODUCTION & AIM**

This preliminary study aims to implement circular economy concepts by reusing agro-industrial waste, such as grape pomace, for sustainable food production.



#### **METHOD**

Three vegan sausage formulations were developed, each containing different proportions of grape pomace.



### **RESULTS & DISCUSSION**

Instrumental colour analysis revealed marked differences between the vegan formulations and the traditional control.

Table 1. Colorimetric determination.

Sausage	L*	a*	b*
F1	16.22±1.14	4.79±0.42	4.95±0.45
F2	15.49±0,14	4.09±0.15	2.11±0,26
F3	15.18±0,58	3.89±0,80	1.29±0.34
С	40.81±0.83	8.36±0.61	23.04±0.47

### The samples containing grape pomace:

- were visibly darker in colour (lower L\* values), which can be attributed to the presence of phenolic compounds naturally present in pomace, such as anthocyanins and tannins.
- There was a significant reduction in the a\* (red) parameter in the vegan formulations (F1 = 4.79, F2 = 4.09, and F3 = 3.89), reflecting the absence of myoglobin, a typical pigment in meat products, and indicating a different colour profile.

#### CONCLUSION

Although different from traditional sausages, these visual changes may appeal to consumers who prefer natural and sustainable products.

Grape pomace shows promise as an ingredient in vegan sausage formulations, offering nutritional value and supporting sustainability by reusing agro-industrial by-products.

### REFERENCES

Lopes, J. d. C., Madureira, J., Margaça, F. M. A., & Cabo Verde, S. (2025). Grape Pomace: A Review of Its Bioactive Phenolic Compounds, Health Benefits, and Applications. *Molecules*, *30*(2), 362. https://doi.org/10.3390/molecules30020362

#### **Acknowledgments**:



Missão Interface within the PRR-Plano de Recuperação e Resiliência (RE-C05-i02-Missão Interface-nº 01/C05-i02/2022), Base Funding for Collaborative Laboratories under the PRR (Plano de Recuperação e Resiliência), and funded by the European Union Next Generation EU.