

## Supplementary Material

### Investigating the short peptidome profile of Italian dry-cured ham at different processing times by high-resolution mass spectrometry and chemometrics

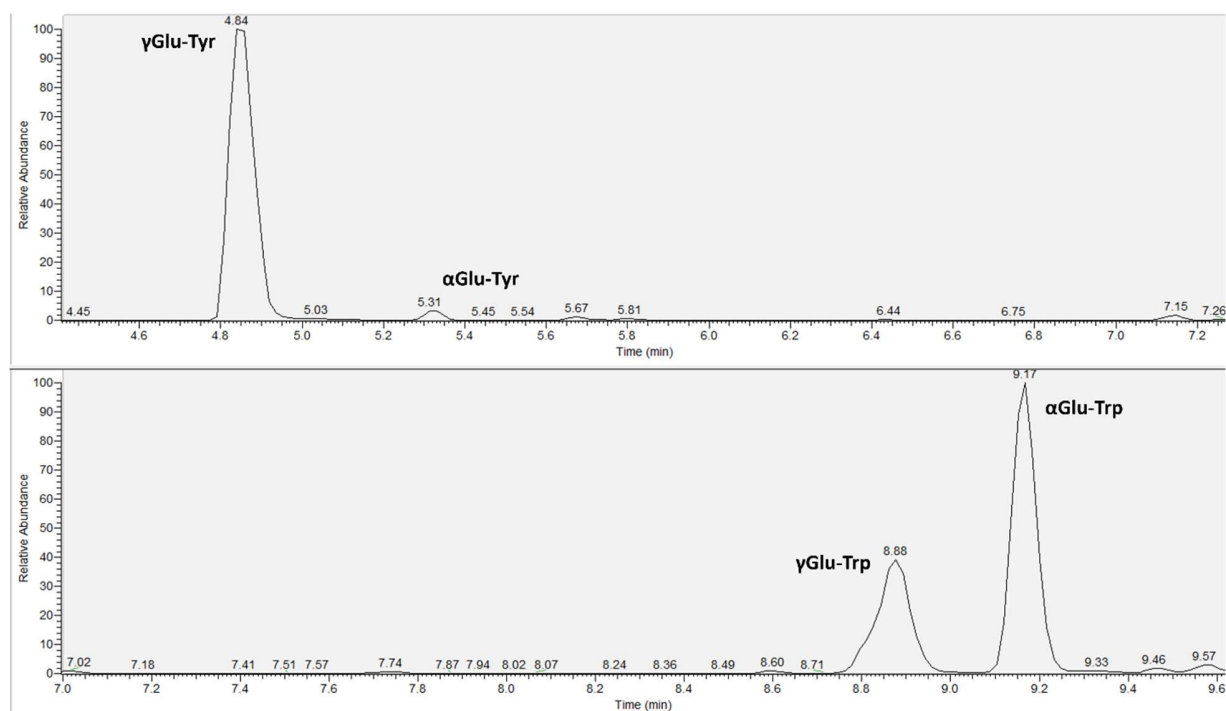
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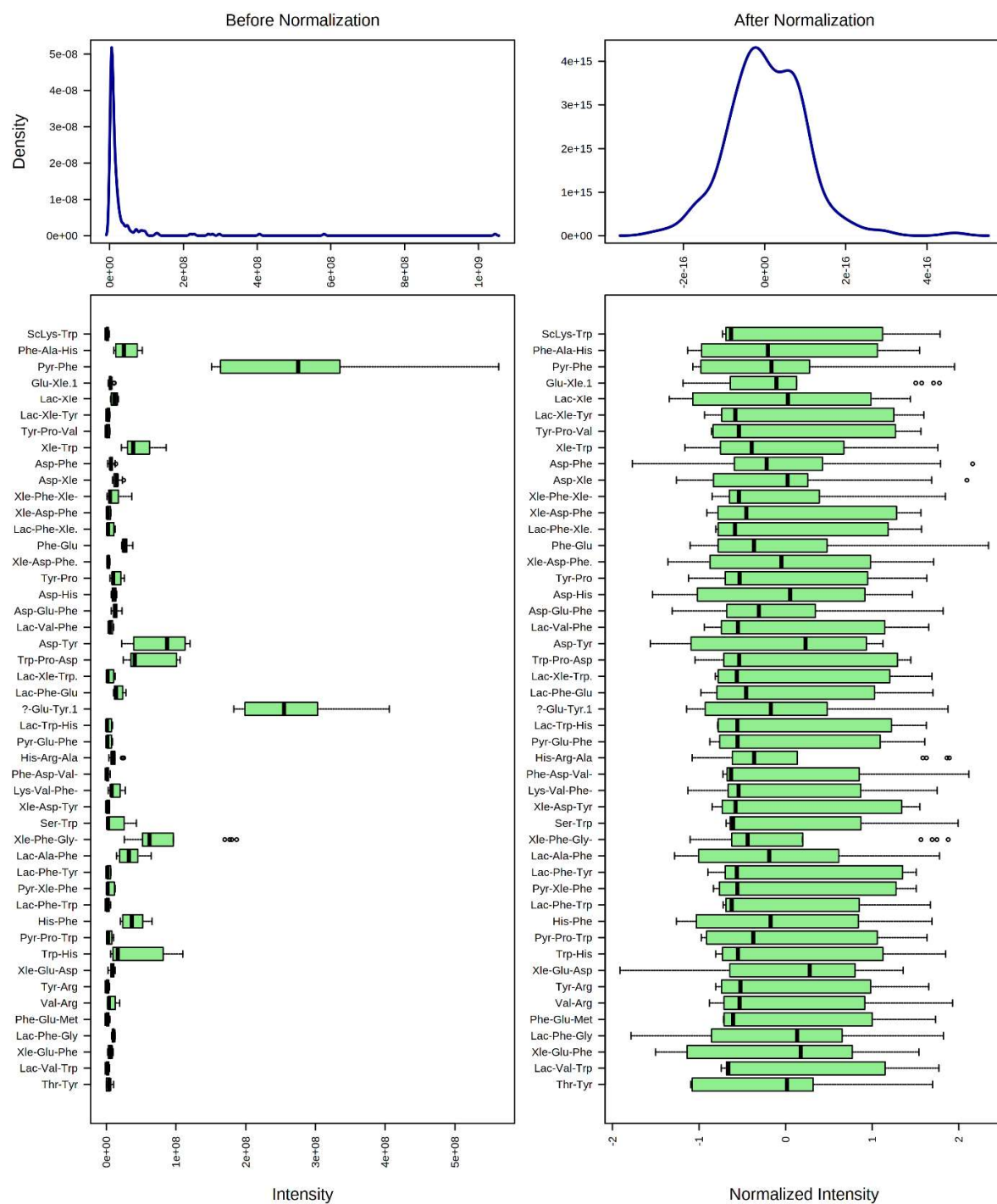
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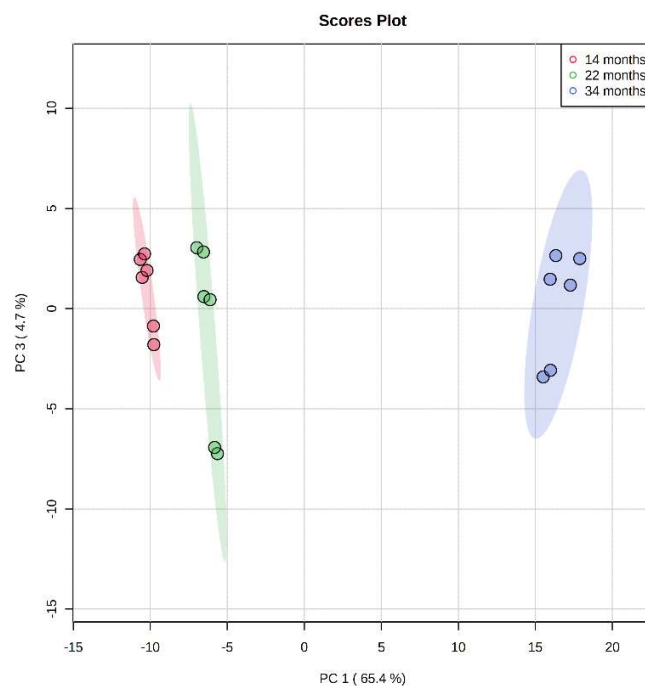
\* Correspondence: [annalaura.capriotti@uniroma1.it](mailto:annalaura.capriotti@uniroma1.it) (A.L.C.); Tel.: (optional; include country code; if there are multiple corresponding authors, add author initials)



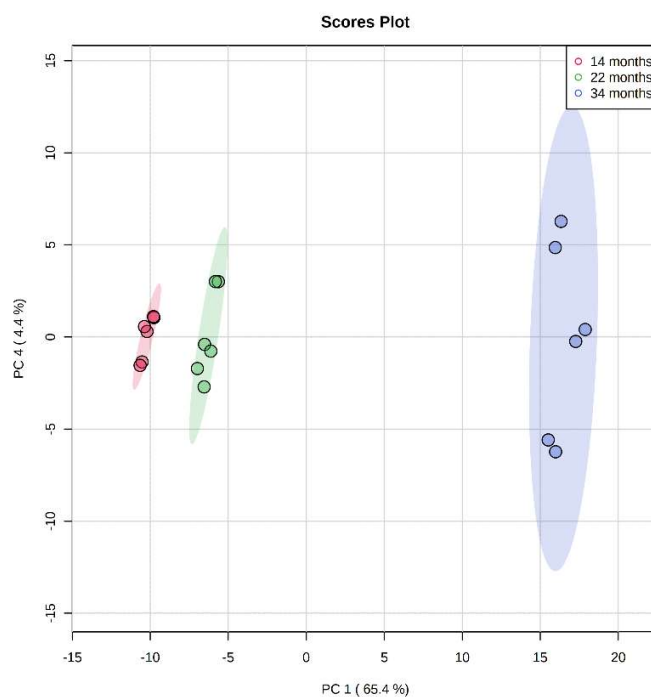
**Figure S1.** Chromatographic peaks of annotated  $\alpha$  and  $\gamma$ -glutamyl amino acids in dry-cured ham samples. Retention time was employed for discriminating the two isomers.



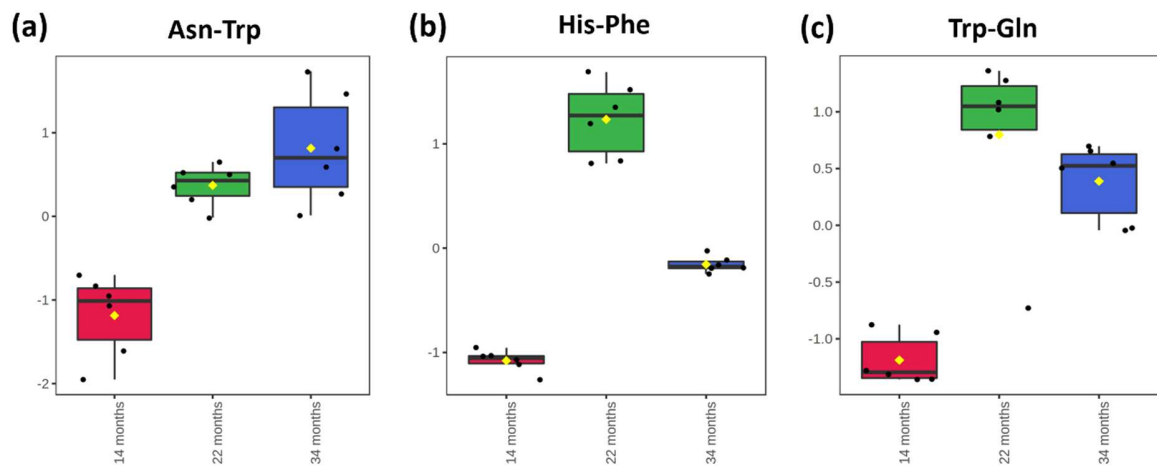
**Figure S2.** Summary of the normalization of the short peptides performed by autoscaling of each variable. The boxplots show 50 features/samples due to space limitation; the density plots are based on all data.



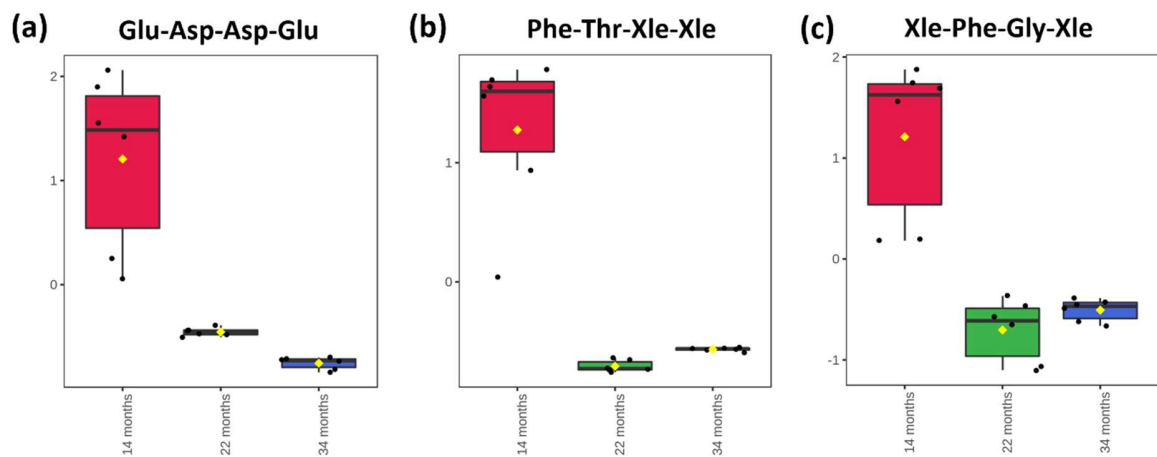
**Figure S3.** PCA modeling (PC1 vs PC3, scores plot) of dry-cured ham samples at the three different processing stages (14, 22, and 34 months) based on the short peptide datasets.



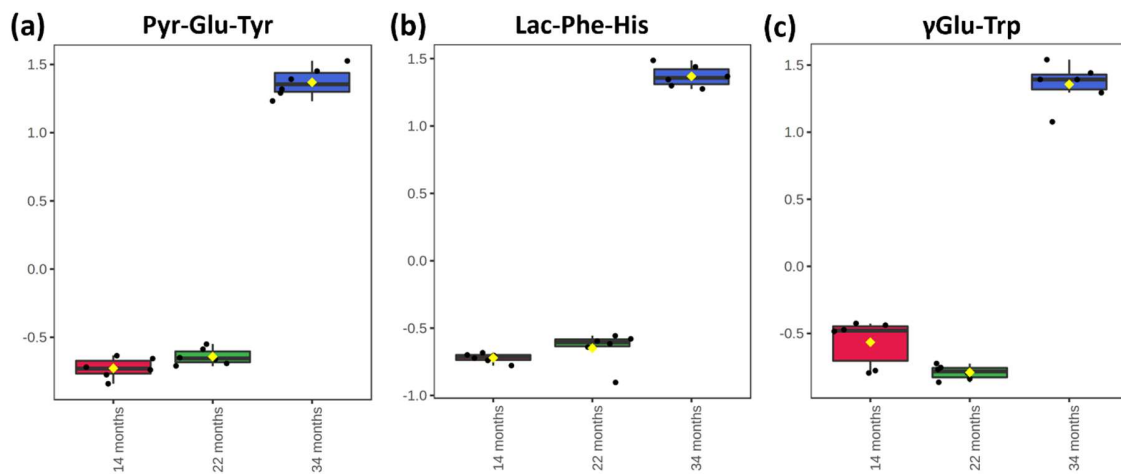
**Figure S4.** PCA modeling (PC1 vs PC4, scores plot) of dry-cured ham samples at the three different processing stages (14, 22, and 34 months) based on the short peptide datasets.



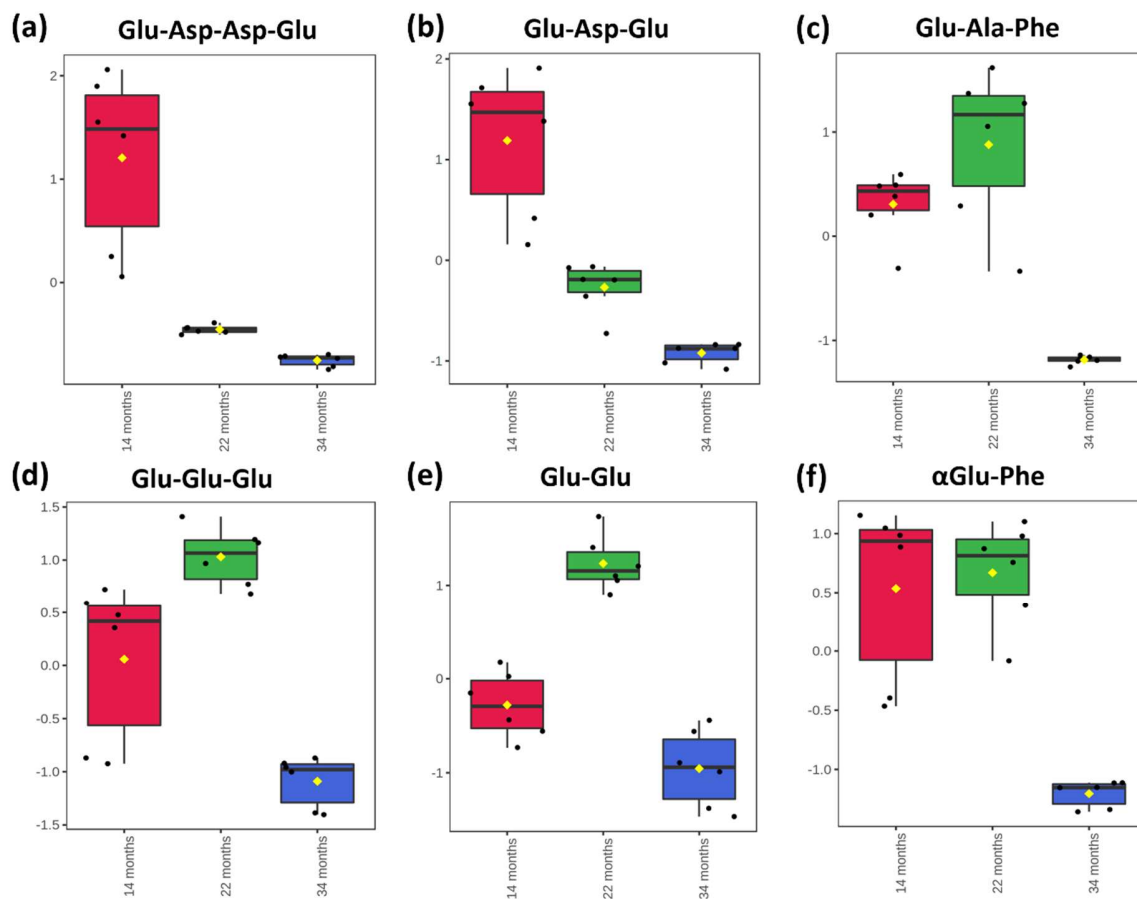
**Figure S5.** Box and whisker plots showing the abundances of three exemplary dipeptides Asn-Trp (a), His-Phe (b), and Trp-Gln (c) that had a significant increase from T1 to T2.



**Figure S6.** Box and whisker plots showing the abundances of three exemplary tetrapeptides Glu-Asp-Asp-Glu (a), Phe-Thr-Xle-Xle (b), and Xle-Phe-Gly-Xle (c) that had a significant decrease from T1 to T2.



**Figure S7.** Box and whisker plots showing the abundances of three exemplary non-proteinogenic amino acid-containing peptides Pyr-Glu-Tyr (a), Lac-Phe-Xle (b), and  $\gamma$ -Glu-Trp (c) that had a significant increase from T2 to T3.



**Figure S8.** Box and whisker plots showing the abundances of short peptides with an N-terminal glutamic acid Glu-Asp-Asp-Glu (a), Glu-Asp-Glu (b), Glu-Ala-Phe (c), Glu-Glu-Glu (d), Glu-Glu (e), and  $\alpha$ -Glu-Phe that had a significant decrease from T1/T2 to T3.