

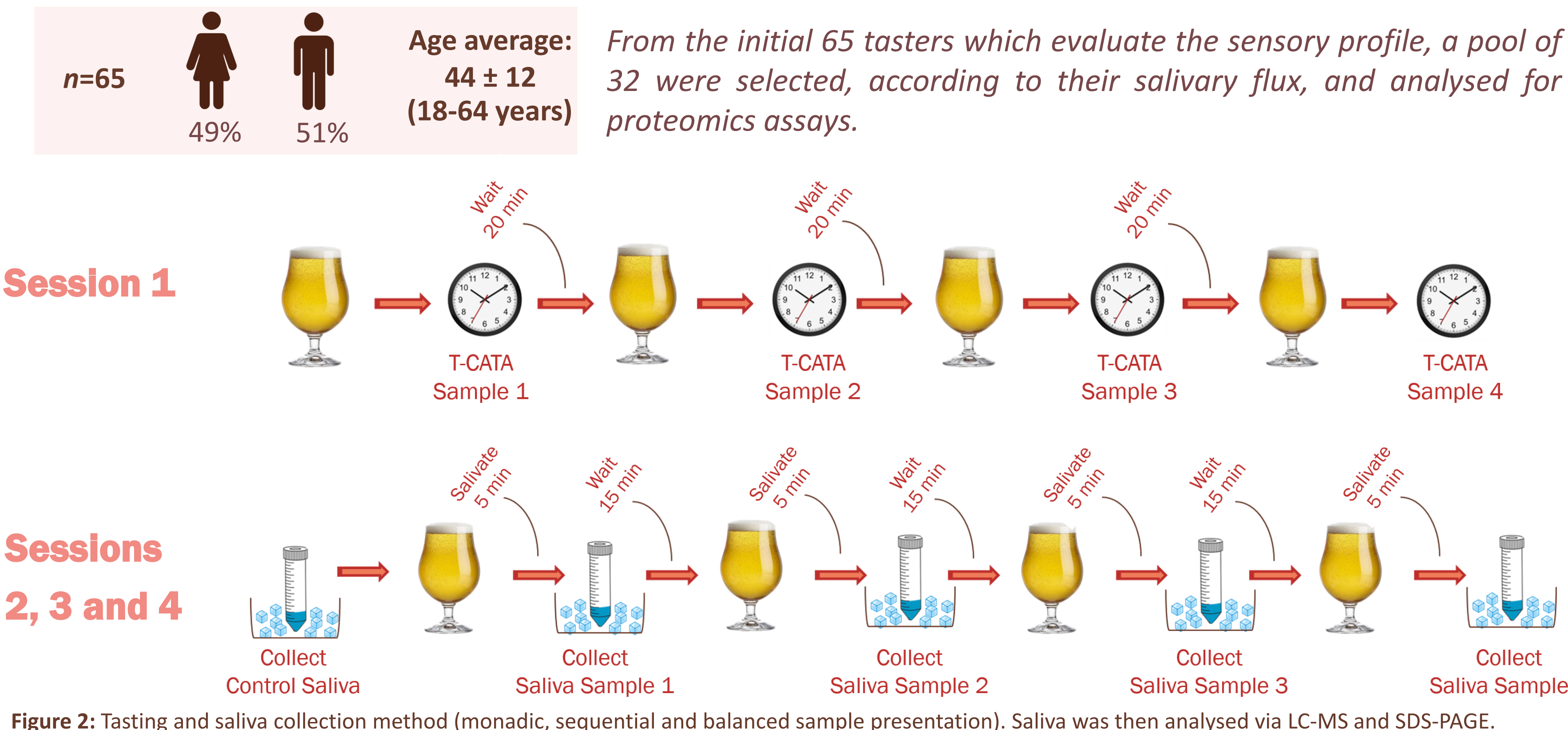
# Influence of different alcohol levels on beer sensory dynamics and salivar proteomic response

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## INTRODUCTION

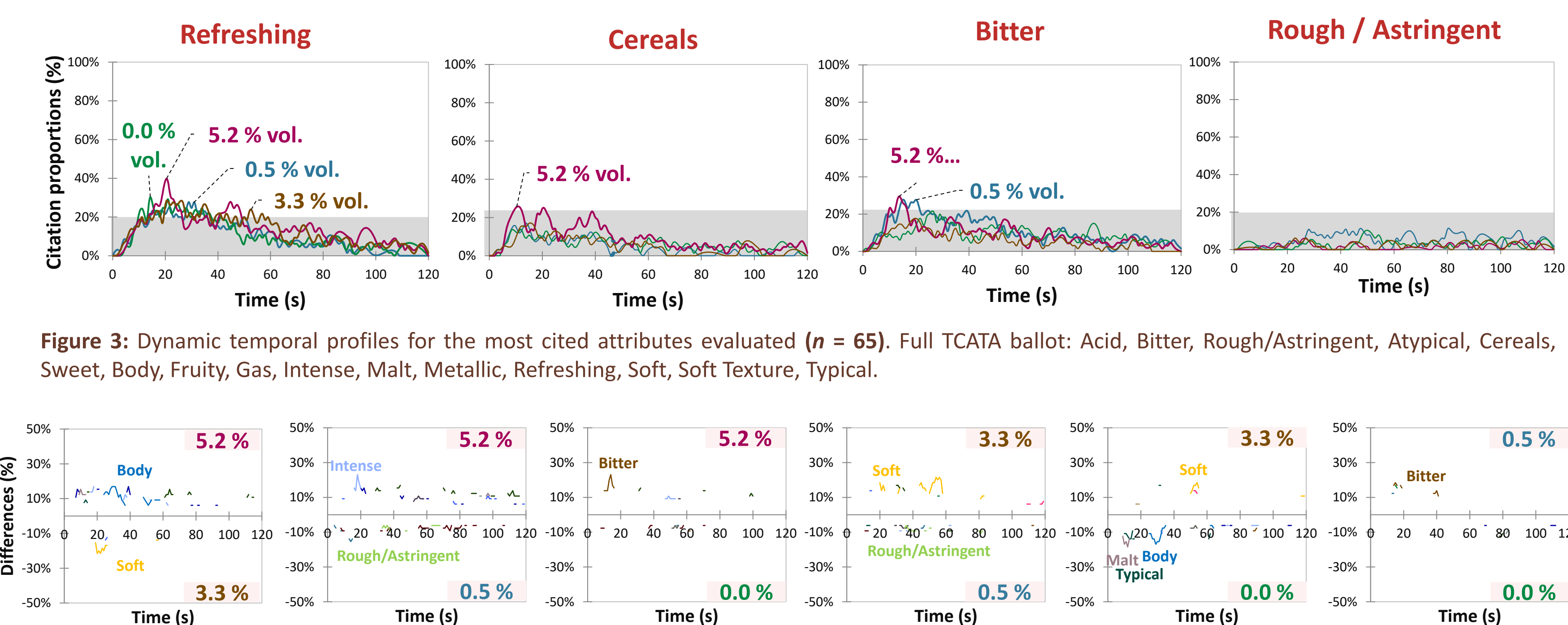
Recent research has extensively explored the influence of alcohol on mouthfeel perception, revealing that its effects are partially driven by interactions with phenolic compounds and salivary proteins. These interactions can alter protein precipitation, ultimately influencing oral texture perception. The present study sought to investigate the relationship between the temporal sensory characteristics of beers with varying alcohol contents and changes in the salivary proteome.

## METHODOLOGY



## RESULTS

### Temporal Profile



## CONCLUSION

Overall, the findings show that salivar proteomic responses are driven mainly by individual variability rather than alcohol content. PRPs showed a biologically coherent decrease after tasting and a weak association with bitterness. MFA showed associations between PRPs, liking scores, and sensory attributes, yet the proteome-perception relationship does not correlate with liking, related with alcoholic content.

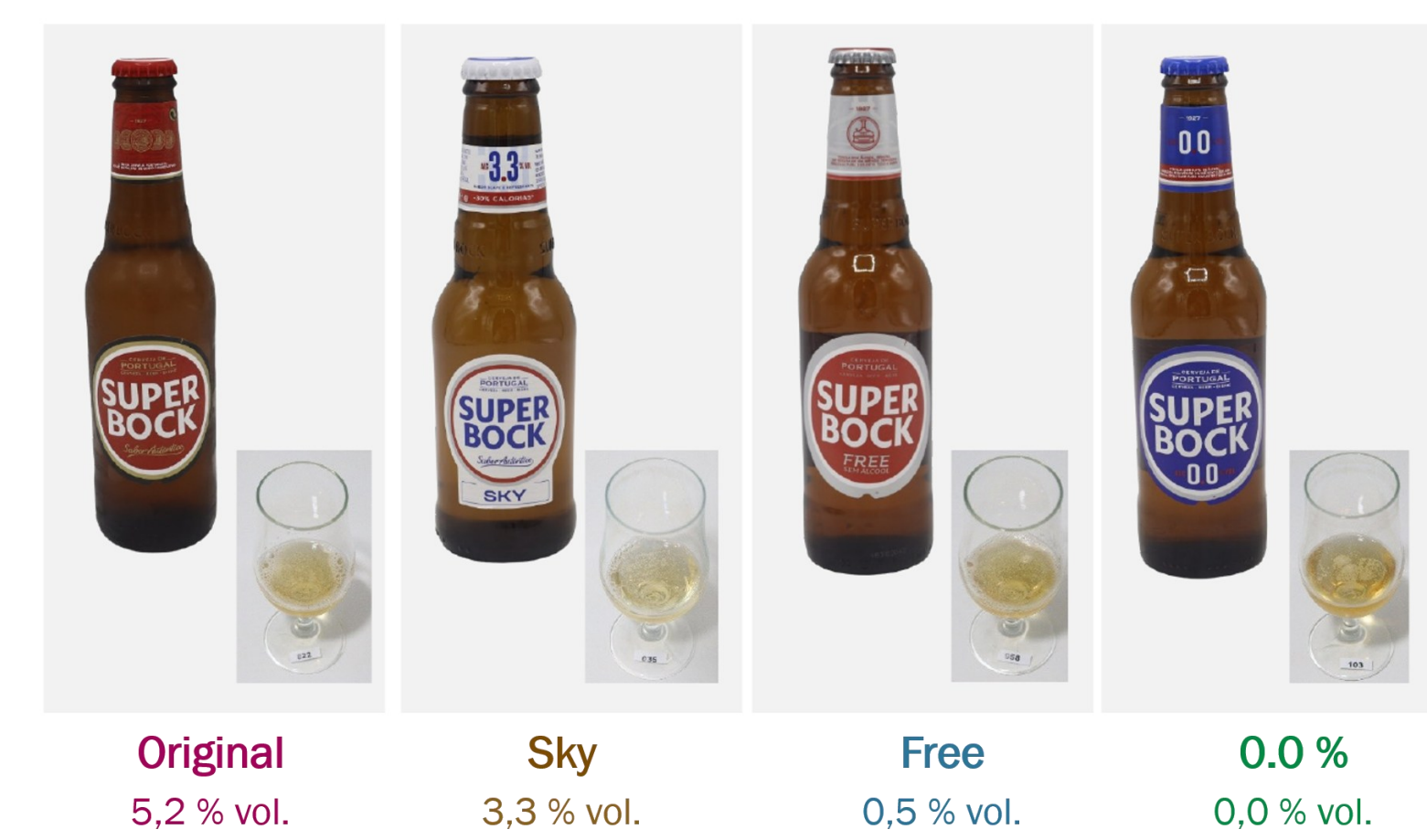
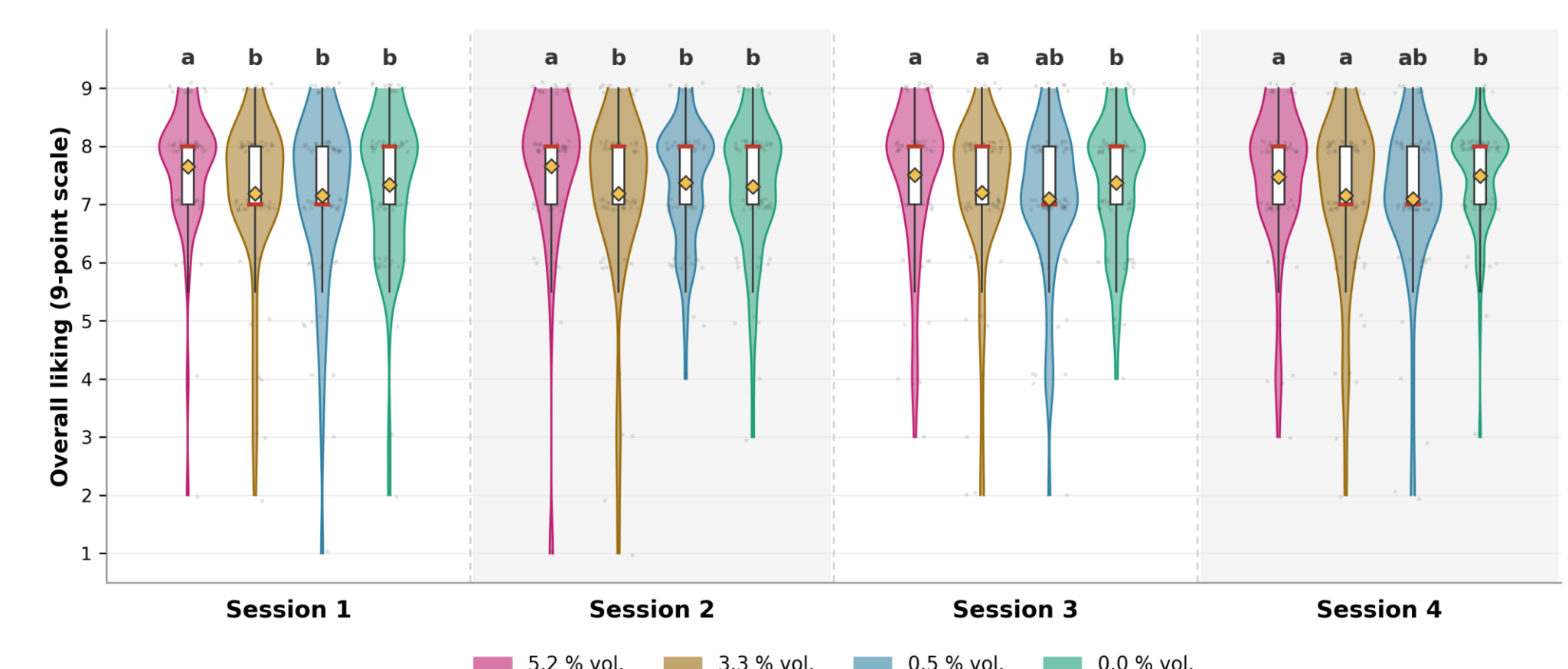


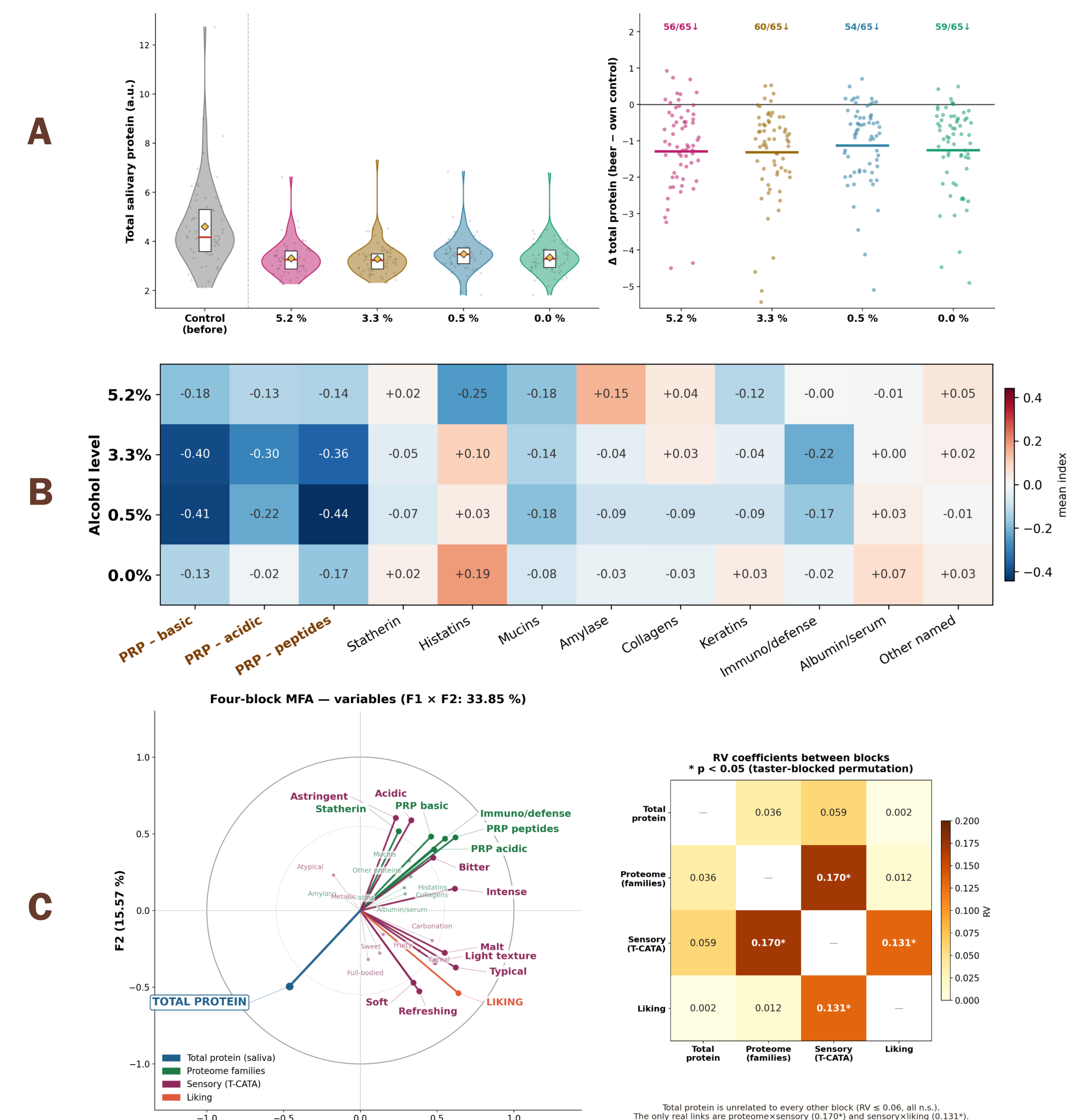
Figure 1: Samples evaluated on different tasting sessions.

### Overall Liking



- Repeated exposure **did not significantly alter overall liking**
- PRPs point toward **Astringent/Acidic/Bitter/Intense**
- Liking scores point toward **Refreshing/Mild/Typical/Malty**
- Nearly orthogonal clusters: the **proteome-perception relationship** and liking formed **nearly orthogonal clusters**, indicating that liking varied independently of alcohol content

### Salivary Content and Proteomic



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