

The Impact of Food Pairing in Hedonic Product Evaluation

a comparison of the overall liking between single and paired evaluation of products

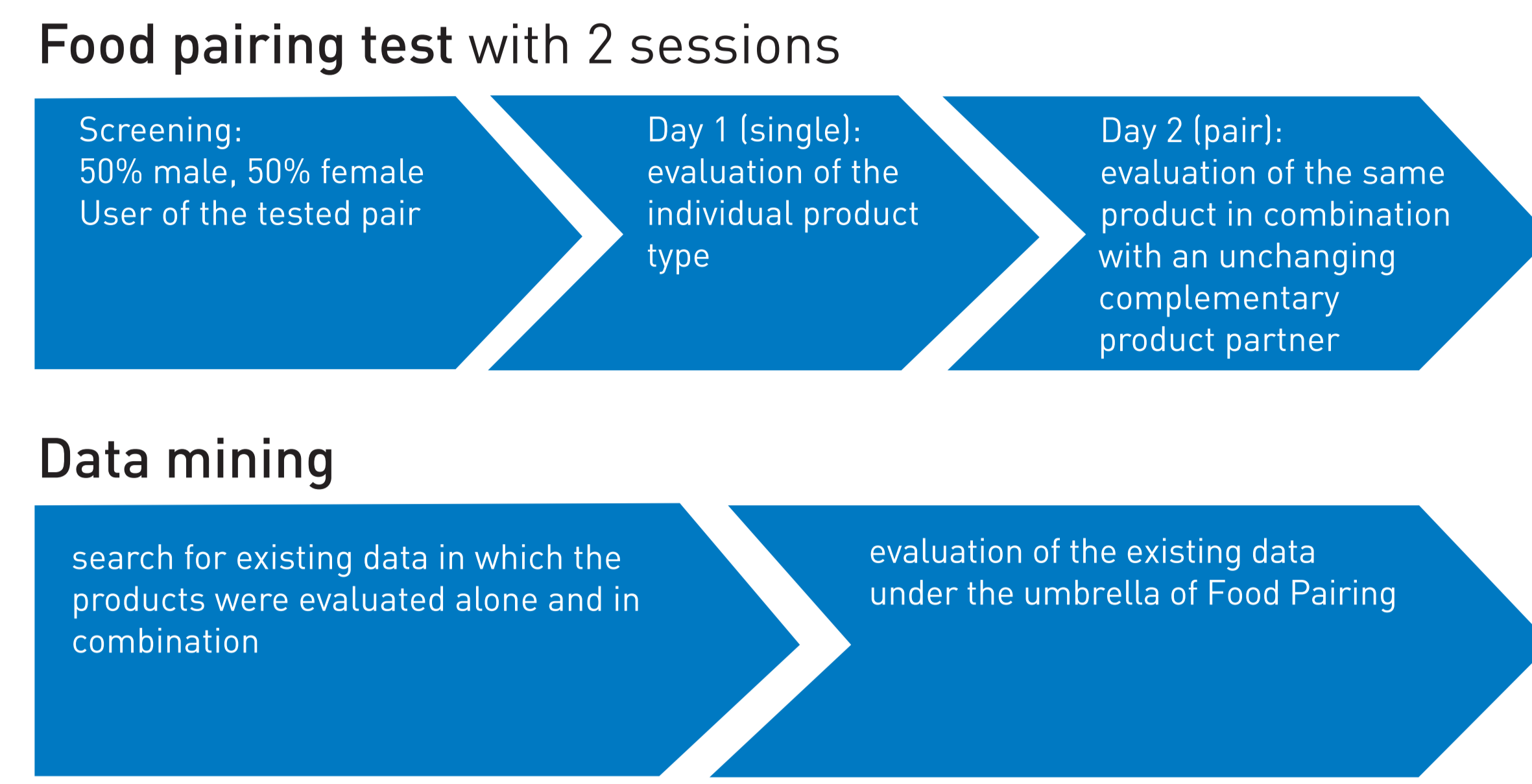
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Objective and Approach

Questions

- Is there a different ranking of products when evaluated single compared to an evaluation as a pair?
- Is there a significant difference of the products' acceptance?
- Are the sensory characteristics (e.g. taste intensity, saltiness, etc.) perceived differently, when comparing single evaluation with evaluation as a pair?
- Is the mood of the respondents impacted differently by a single or paired evaluation?

Test Setup



Location / Products

Munich: chips with beer (N=33)
 Zurich: pizza with cola (N=25)

Munich: cheese with bread (N=241)
 Hamburg: rum with cola (N=120)

Results

Chips paired with beer (heterogeneous pair)

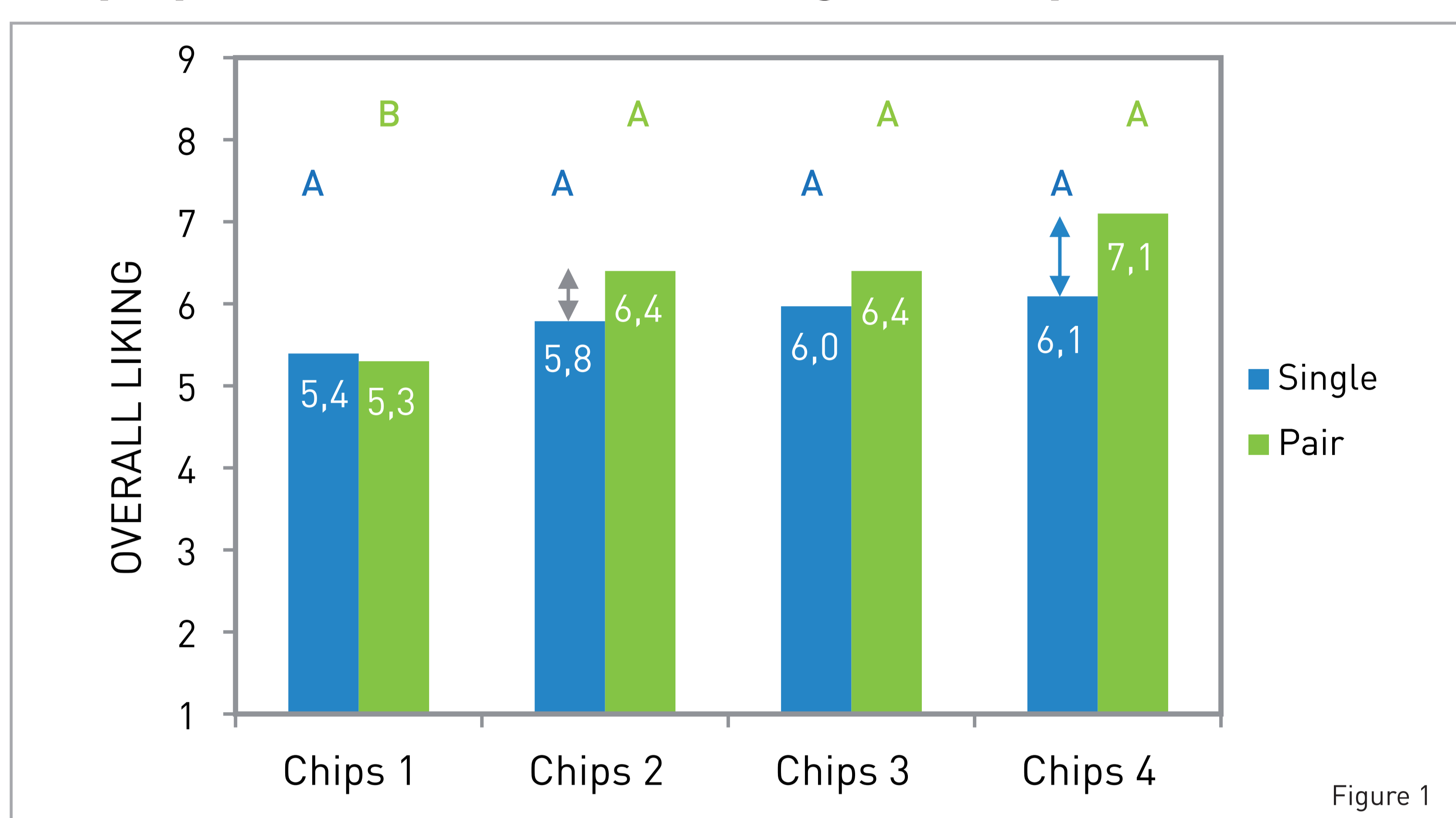


Figure 1

Some products show a significantly higher acceptance when tasted as a pair compared to the single tasting, but not all. There are no interactions in the product ranking (figure 1).

Cheese paired with bread (heterogeneous pair)

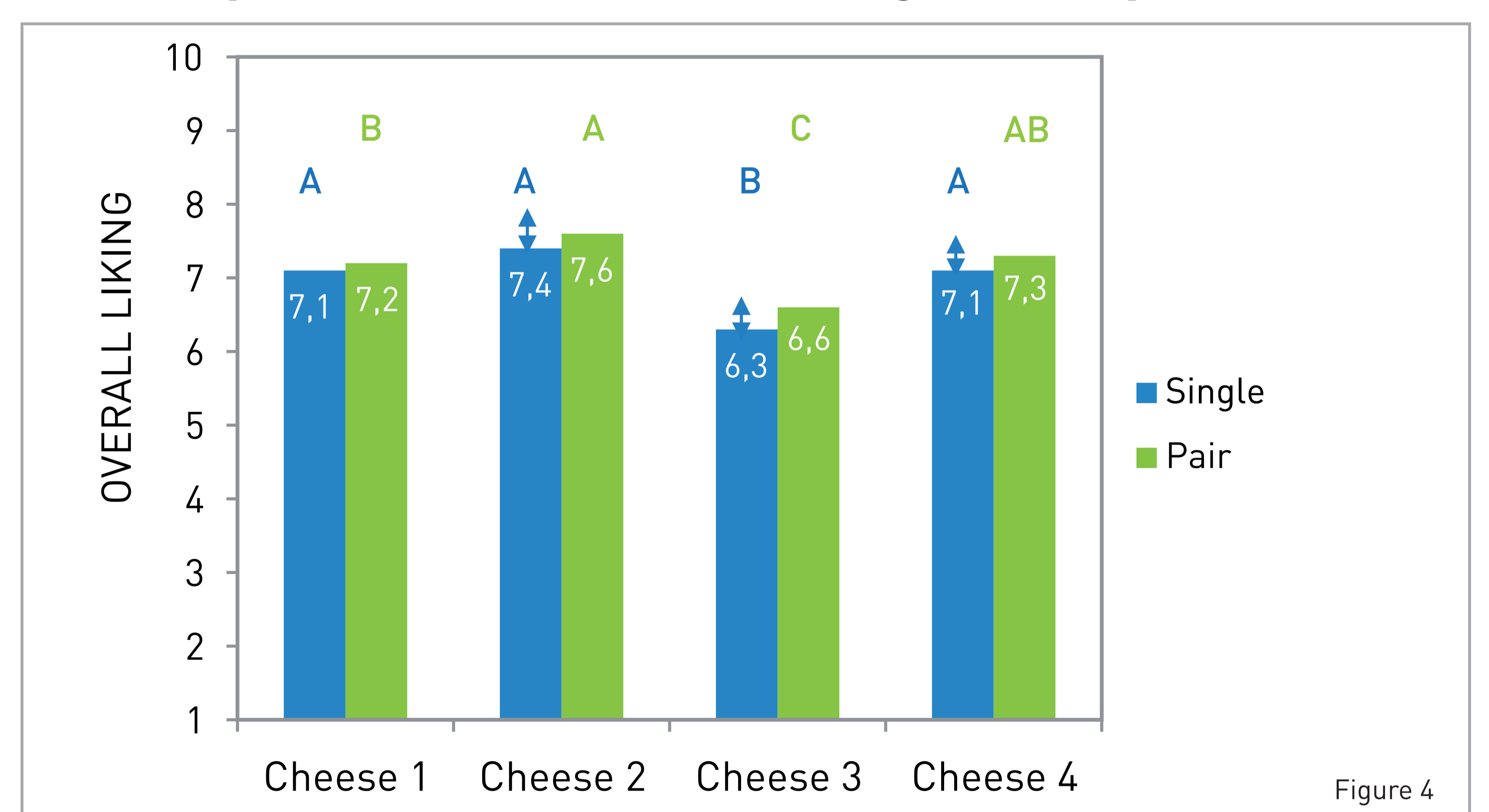


Figure 4

Some products also show a significantly higher acceptance when tasted as a pair. However, there are no interactions, neither in overall liking, nor in ranking (figure 4).

Taste intensity JAR

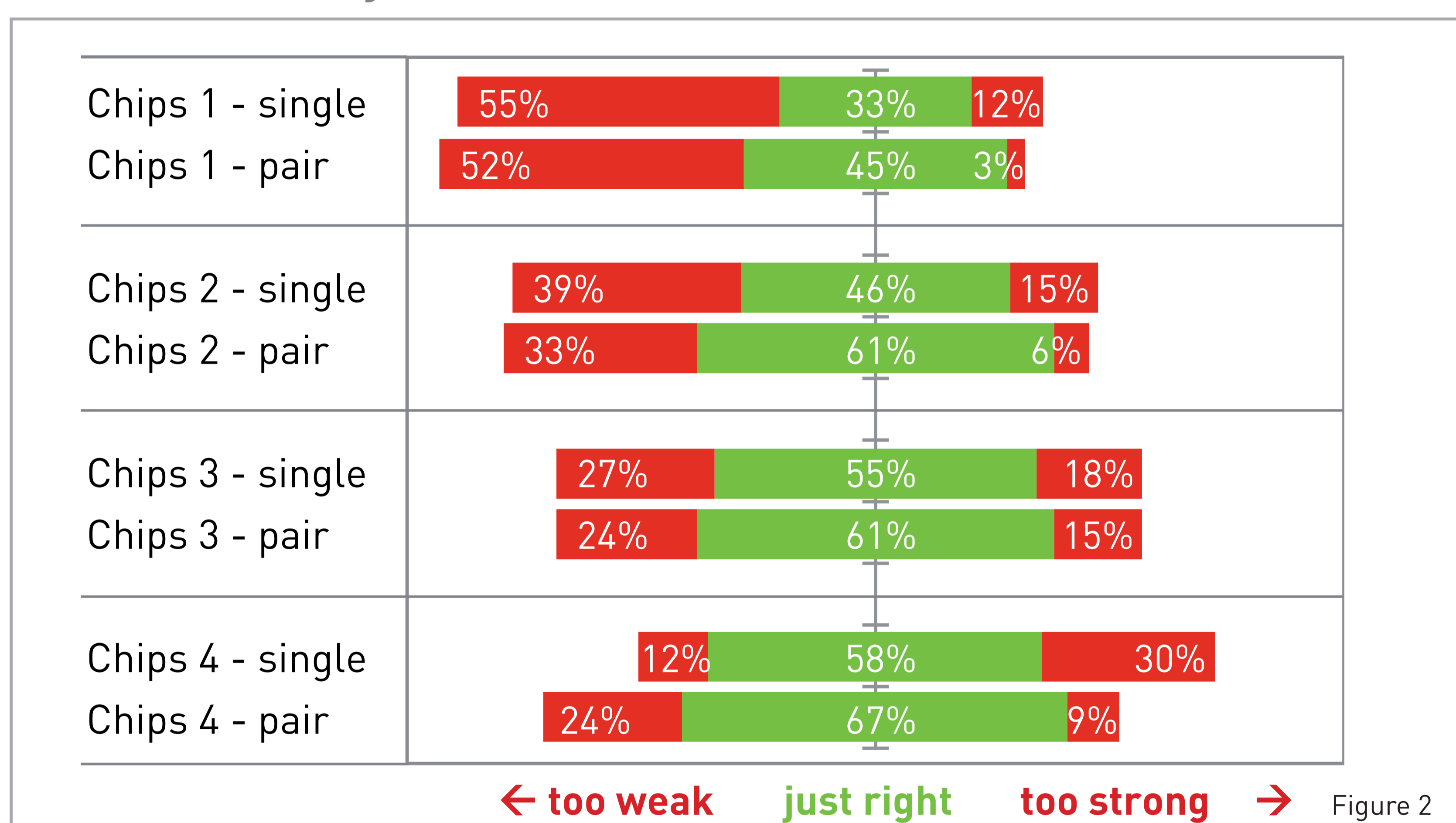


Figure 2

The perception of the taste intensity decreases from single to pair tasting by tendency and the level of Just Right increases (figure 2). Further analysis showed, that the evaluation as a pair does not change consumers' mood.

Pizza paired with cola (heterogeneous pair)

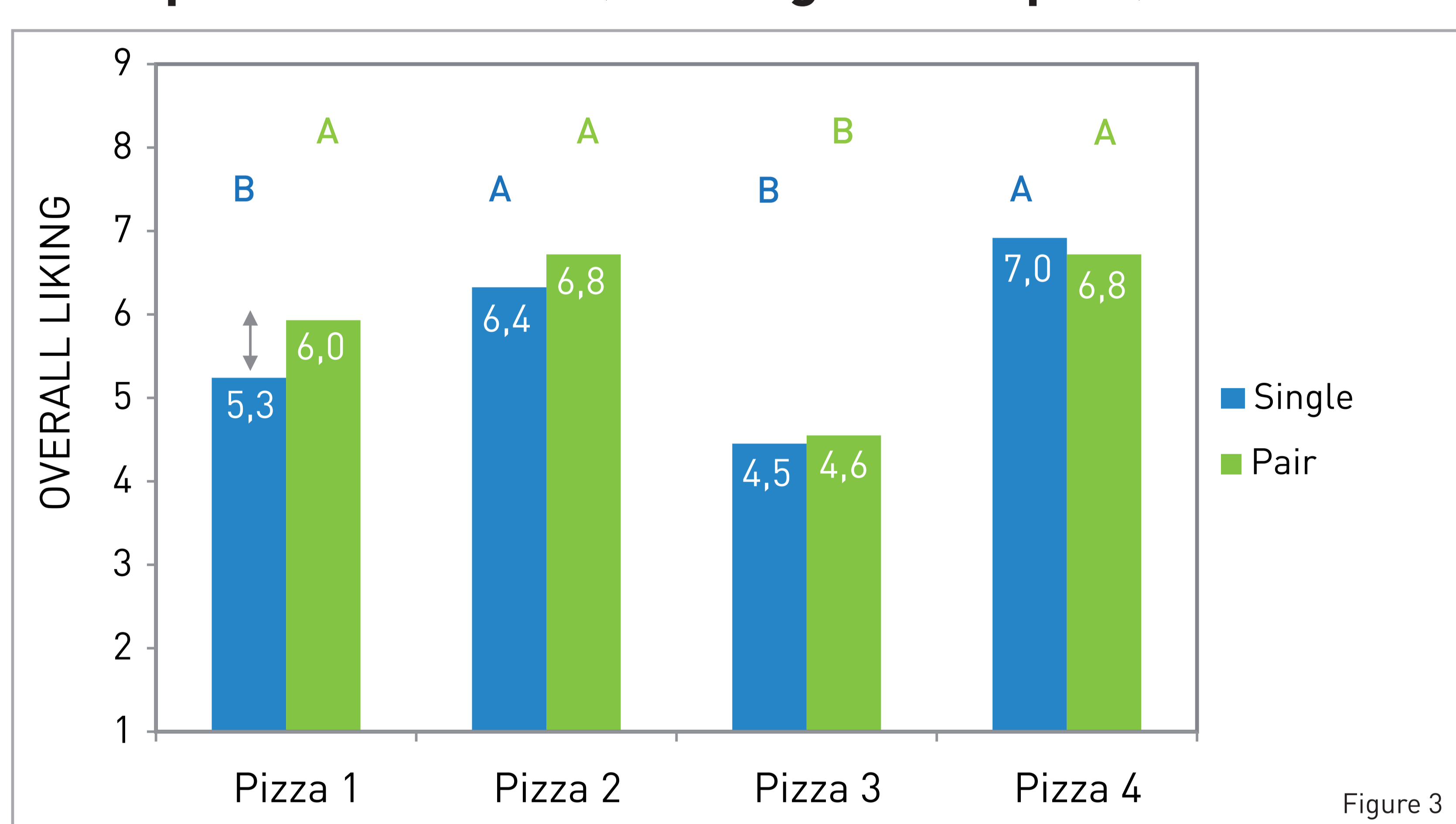


Figure 3

There are no interactions, neither in overall liking, nor in ranking. The lowest rated product stays at the same rank after the pair tasting (figure 3).

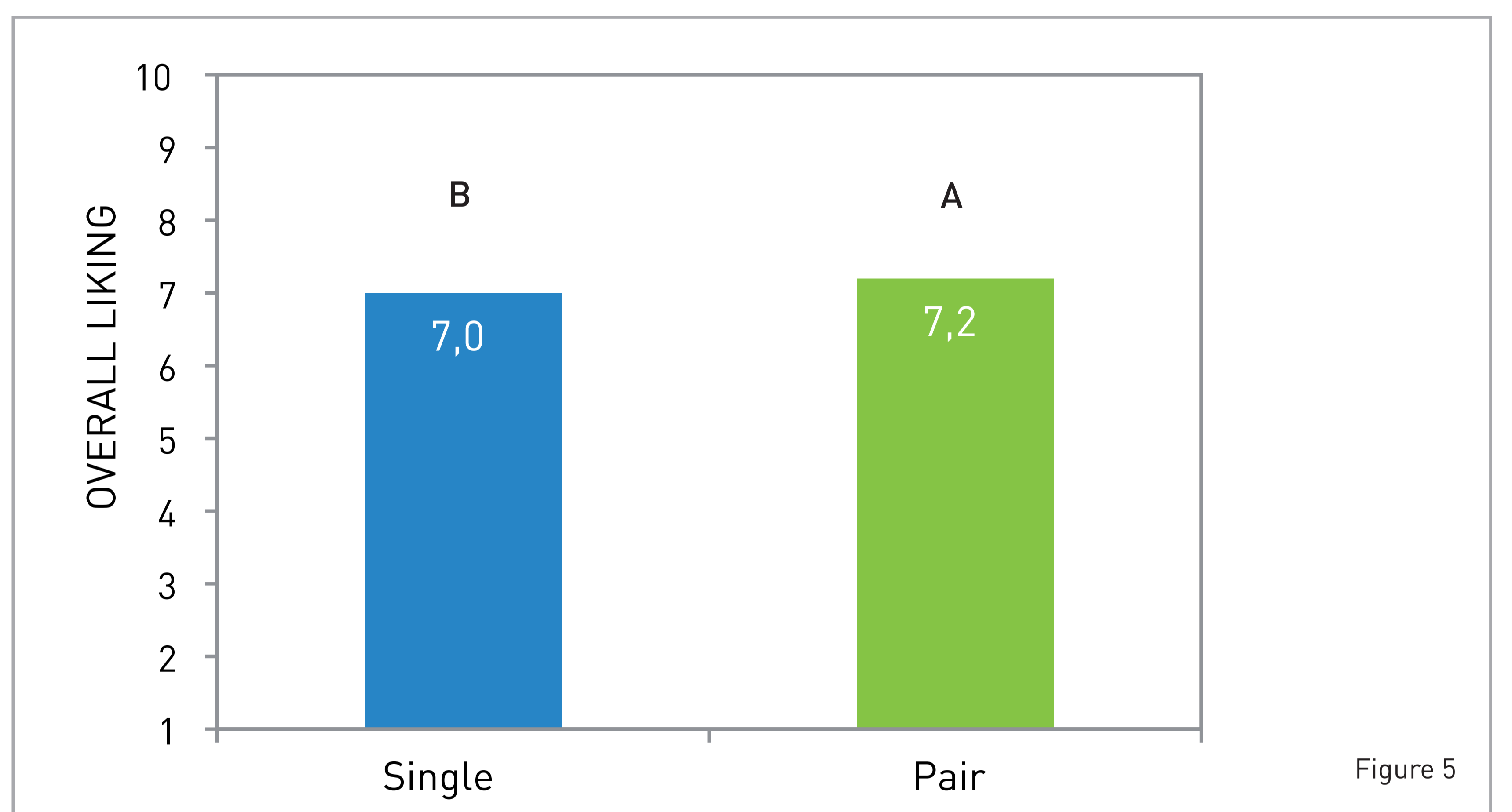


Figure 5

The comparison of the overall liking of all cheese products shows a significant difference between single and pair tasting (figure 5).

Rum paired with cola (homogeneous pair)

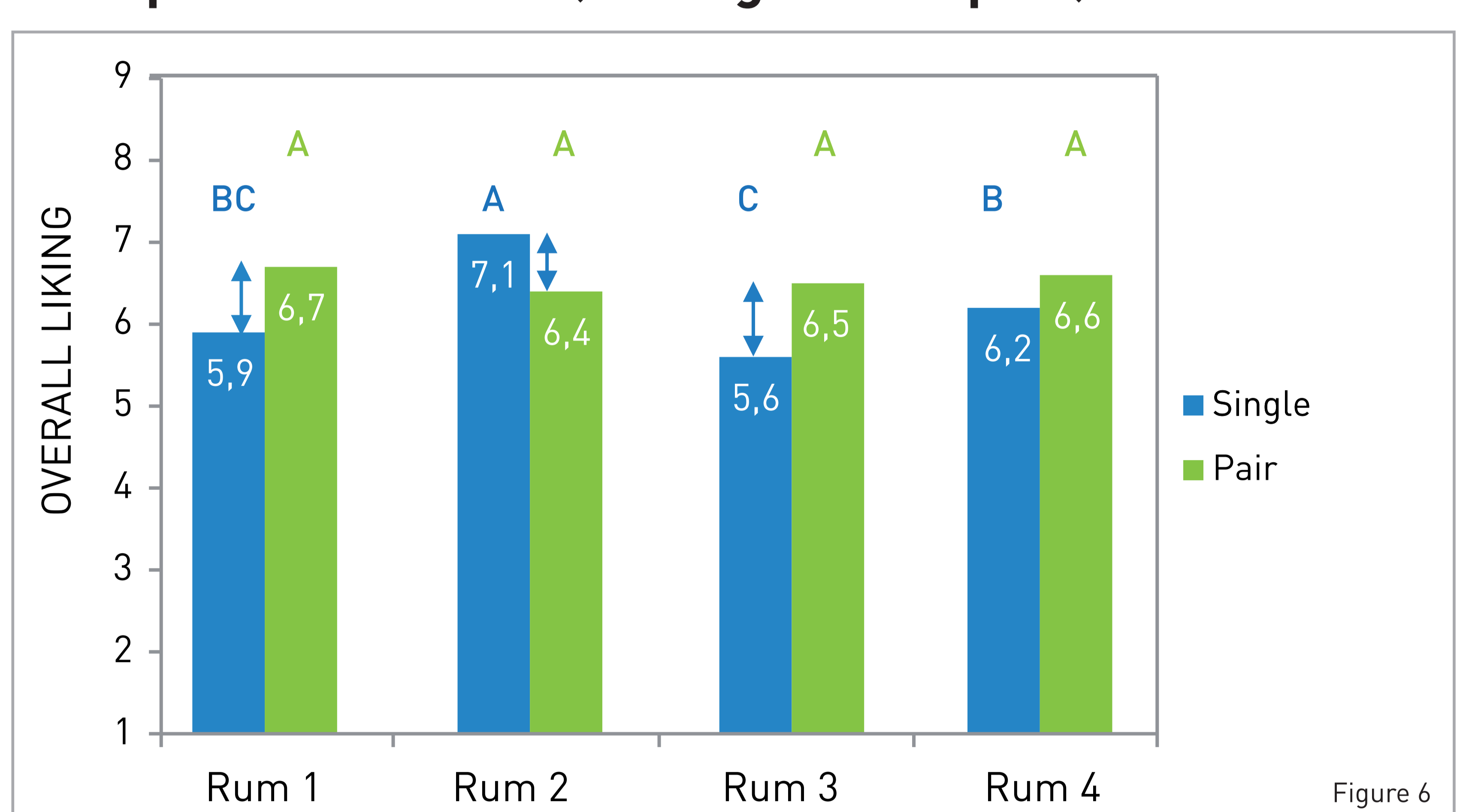


Figure 6

Interactions were found in the overall liking evaluation. The differences of product evaluation between single and paired tastings can be significant. The tasting of the rum-cola-mix as pair makes the difference between the different rum products disappear (figure 6).

Conclusion

- By tendency, products are evaluated on a higher acceptance level and higher counts for "just right" evaluation of sensory characteristics are found when products are tested as a pair compared to single product testing. This can be explained by the composition of the pair-combination consumers are used to.
- The correlation of sensory characteristics with overall liking does not change between paired and single tasting in heterogeneous food pairs.
- The analyzed three heterogeneous food pairs did not reveal changes in the product ranking when comparing results of single and paired evaluations. On the contrary, the investigation of the homogeneous product pair showed that a paired evaluation of different products caused an existing discrimination for the single product to disappear (negation effect) – and hence caused interactions in ranking to appear.
- In summary it can be stated, that food pairing, especially with homogeneous food pairs tends to cover the need for product improvement (lower discrimination, more "just right" statements, negation effects).

- It is recommended to consider in all cases a single product evaluation. An evaluation as pair is recommendable, if the normal consumption of the product is as pair. However, single and paired evaluation can be done in the most of the cases in one session, there is no need to do such an evaluation in two different sessions.

