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How to train your flavor:

Does familiarization enhance liking of a novel Jasmine flavor?

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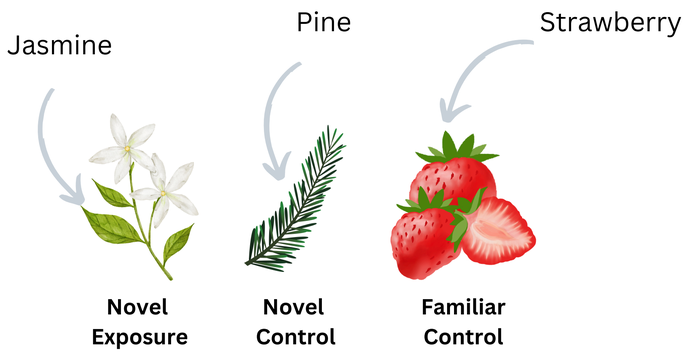
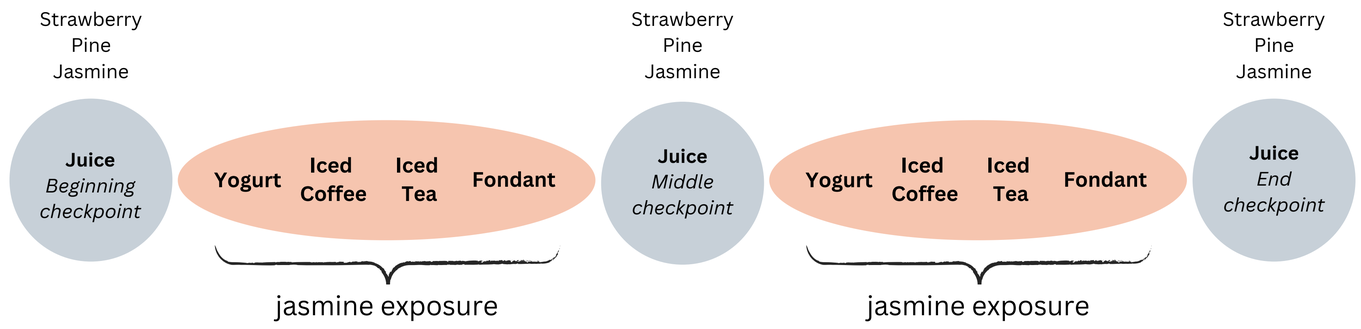
Introduction

- When choosing food & beverage flavors to consume, people often gravitate to what they know[1,2]
  - Unfamiliar foods can elicit unease, which makes it difficult to launch successful new products into the marketplace
- Exposure to novel foods has reduced food neophobia (fear of new things) in children[3-5] and adults[6,7]
- The role of familiarity on acceptance has been studied using chewing gum[8], red wine[9], tea[10], meat[11] and ice cream.[12]

Hypothesis

By familiarizing panelists to a novel flavor in several formats, acceptance would increase.





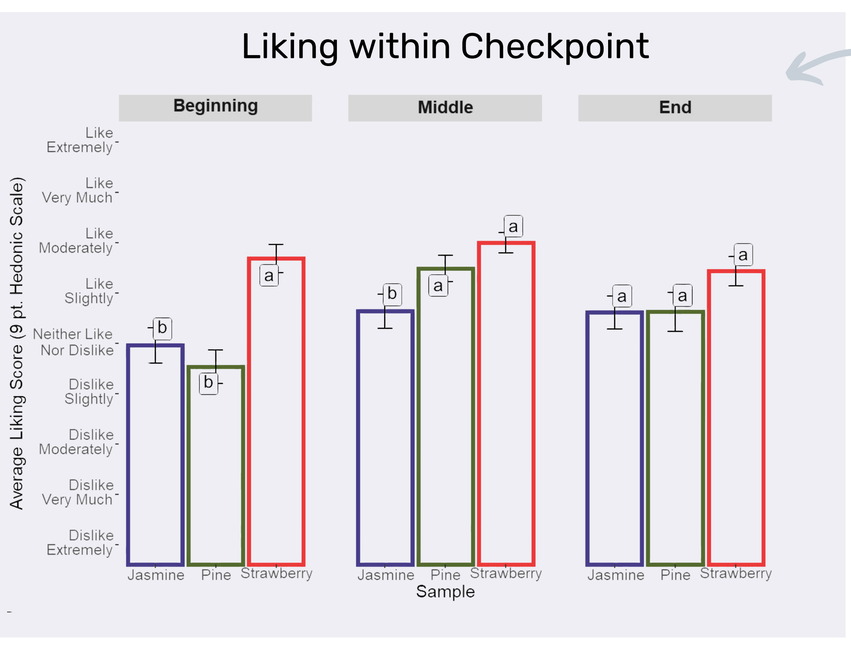
Methods

Panelists were exposed bi-weekly to a Jasmine flavor in 5 ecologically valid applications. At the beginning, middle & end checkpoint, Jasmine (novel), Pine (novel control) & Strawberry (familiar control) were evaluated in juice for liking & familiarity.

Results

Models

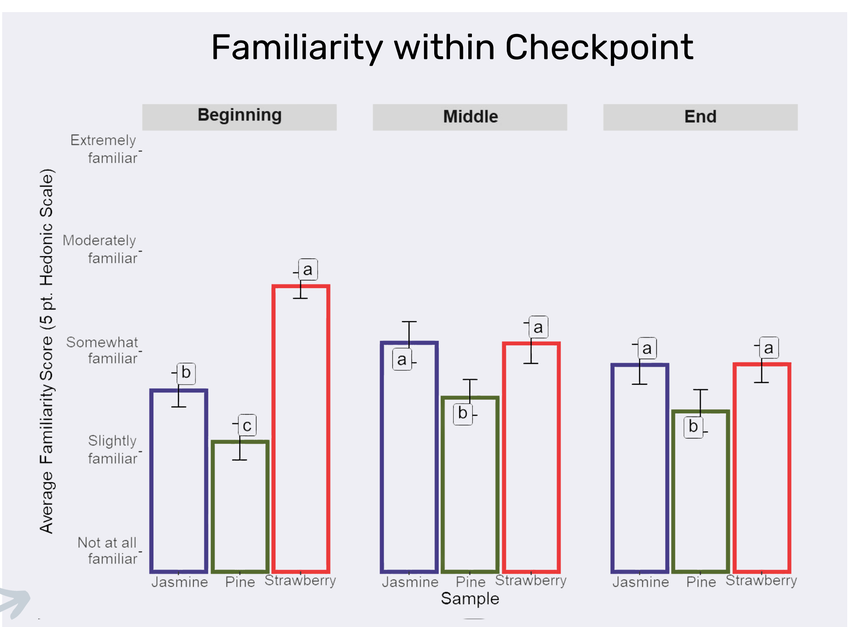
For each flavor, liking & familiarity were modeled against time & panelist. Additionally for each time point, liking & familiarity were modeled against flavor & panelist. Modeled data was filtered for panelists (n=64) that attended at least one exposure between each checkpoint. Post hoc analysis was performed using Tukey's HSD with an alpha = 0.10.

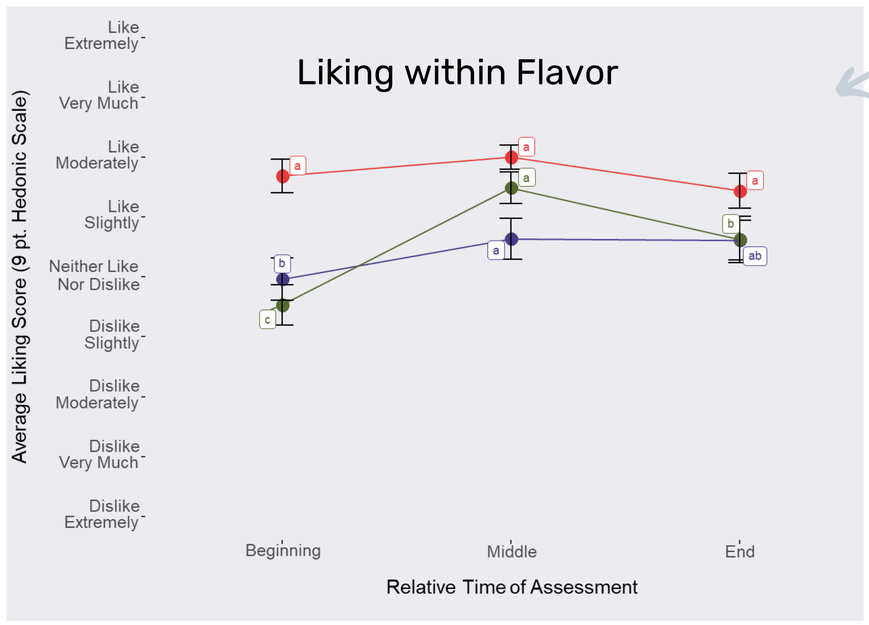


*Liking scores for Strawberry were sig. higher at the **beginning** compared to Jasmine & Pine ($p<0.10$). At the **middle** checkpoint, Pine was liked at parity with Strawberry. By the **end**, all flavors were liked at parity ($p>0.10$)*

sample
- jasmine
- pine
- strawberry

*Familiarity scores for Strawberry were sig. higher than Jasmine & Pine at the **beginning** ($p<0.10$). By the **middle** & at the **end**, Jasmine and Strawberry were considered to be at parity ($p>0.10$) for perceived familiarity*

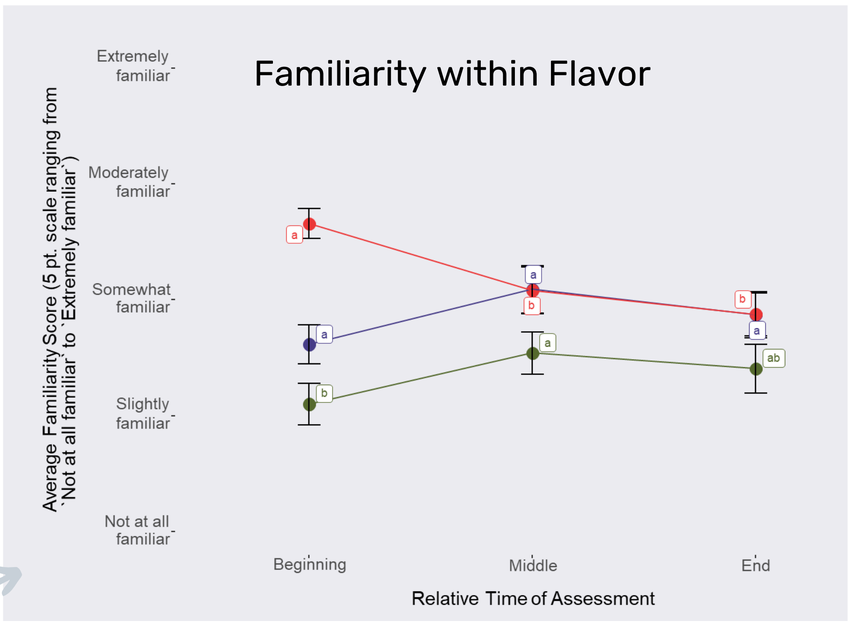




*Liking scores for Pine & Jasmine were sig. higher by the **middle**, but Jasmine was only at parity by the **end** checkpoints ($p>0.10$)*

sample
- jasmine
- pine
- strawberry

*Familiarity scores were not sig. increased over time for Jasmine (novel experiment), but were for Pine (novel control) ($p<0.10$). Strawberry familiarity was reported to be sig. lower at the **middle** & **end** checkpoints ($p<0.10$)*



Conclusion

- Liking was reported to significantly increase for Jasmine & Pine novel flavors.
  - By the middle checkpoint, Pine was actually significantly more liked than Jasmine and was at parity with Strawberry
  - At the end checkpoint, Jasmine & Pine were at parity with Strawberry for reported liking
- Familiarity was not reported to significantly increase for Jasmine, but was for Pine by the middle checkpoint.
  - At the last checkpoint, reported familiarity for Jasmine was at parity with Strawberry, but Pine was significantly lower.
- Strawberry was reported to be less familiar over time.
  - This may be due to panelists being unable to use the scale consistently, among other biases.

Related Literature

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