

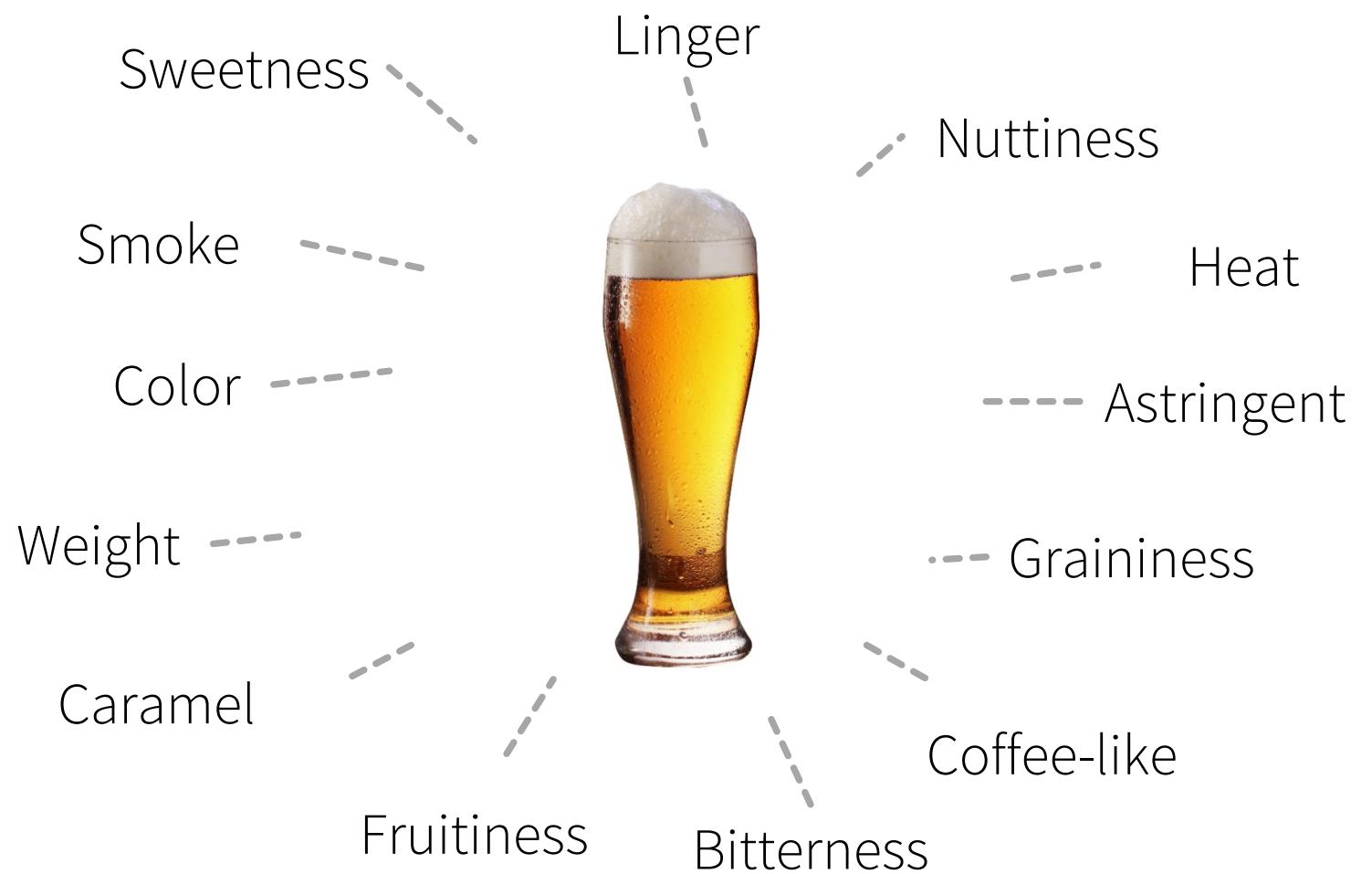
A close-up photograph of several glasses filled with beer, some with thick foam heads, arranged in a row.

Increasing Beer Quality Using Practical Tasting Methods

Brooke Porter, *DraughtLab Sensory
Software*



SENSORY SCIENCE



WHAT IS IT?

- Groups of Tasters
- Measure Product Attributes
- Market Research, R&D, QC



QUALITY IS WHAT SETS YOU APART



Sensory ensures your products are:

-high quality and consistent



Sensory Science is the only way to directly measure the **factors** that influence liking.

Subjective: Why do they like it?

Objective: What drives liking?



SENSORY IS APPROACHABLE...I PROMISE!

- Odds are you are already performing tastings and sensory!
- We are constantly performing sensory evaluations in our daily lives.

WHERE TO START

- Taste your products!
- Get to know your product throughout the brewing process.
 - During Fermentation
 - Before/after dry hopping
 - Pre-carb/post-carb
 - Finished product





Start with using **consistent language** to create product descriptions.



Keep it **simple** and **efficient**

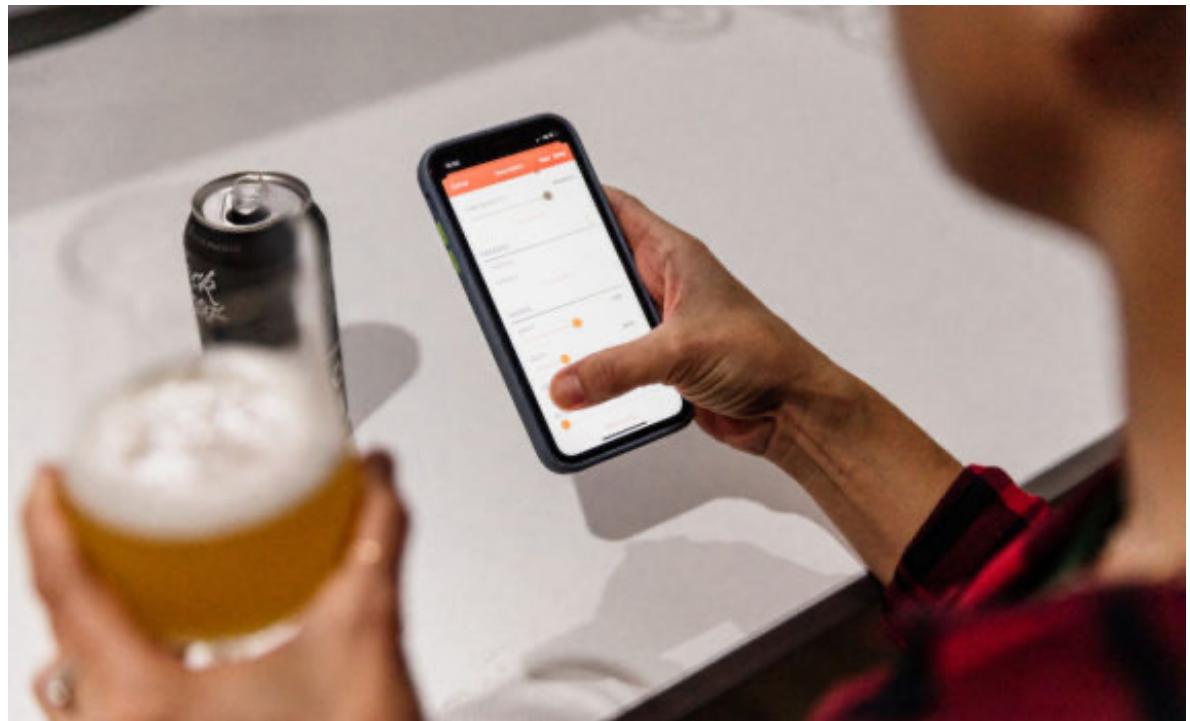


Document your tastings.



CREATE PRODUCT DESCRIPTIONS

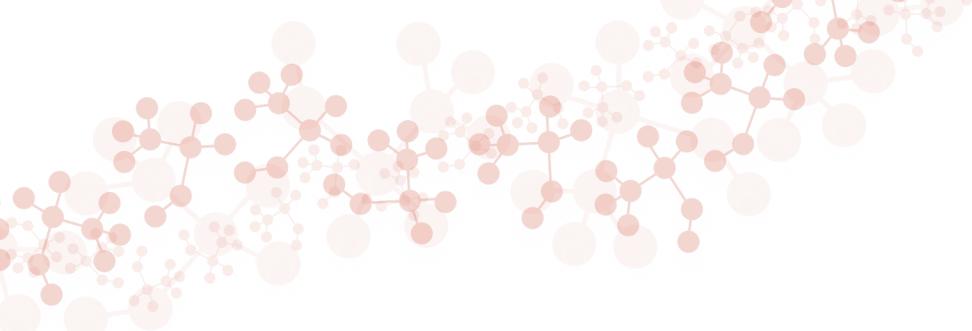
- Creating a baseline description for your products is the foundation of any successful sensory evaluation.



THE BEST WAY TO APPROACH CREATING DESCRIPTIONS

- Consistent language!
 - Keep descriptions focused and approachable.
 - Makes describing products less intimidating.





THE METHOD

- Once you have consistent language established, you can move onto a more scientific sensory approach, the **Description Test**.

WHAT IS THE DESCRIPTION TEST AND HOW IS IT USED?

- The Description Test determines the flavor profile of a sample.
 - Tasters will **describe the flavor profile** of individual modalities (appearance, taste, aroma etc.) using common lexicons.
 - Those results will then be aggregated, any overlap will be found, and the target will be built based on the data.



Description Test

WRITTEN DESCRIPTION USES

- Track successful recipes
- Description for reference when developing a recipe
- Lexicon training
- Further quality testing



Amber

Beer Flavor Map

Brand Code: N/A

Edit



WRITTEN DESCRIPTION

This flavor description is the current written baseline target from which all subsequent batches will be compared.

VISUAL: Dark amber color with a bit of haze & light brown foam.

AROMA: Rose, fruity aromas, walnut & honey.

TASTE: Subtle sweetness and mildly bitter.

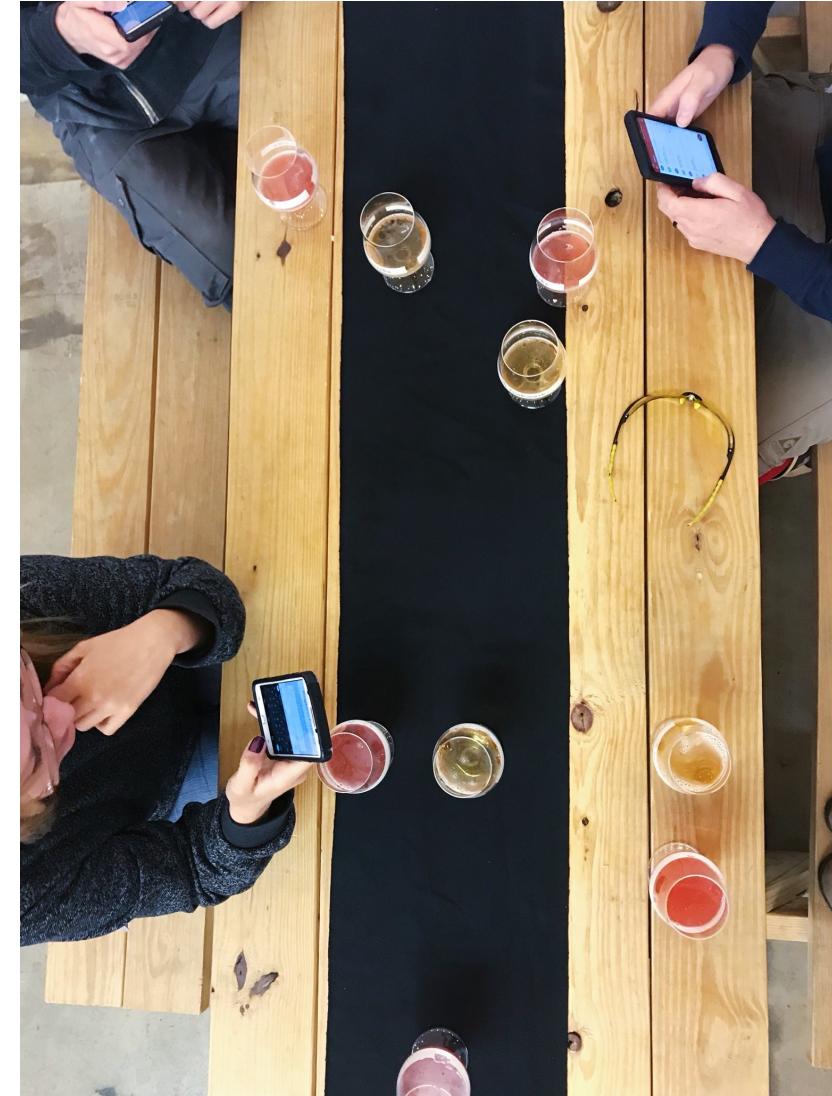
MOUTHFEEL: Medium body and some tingling carbonation.

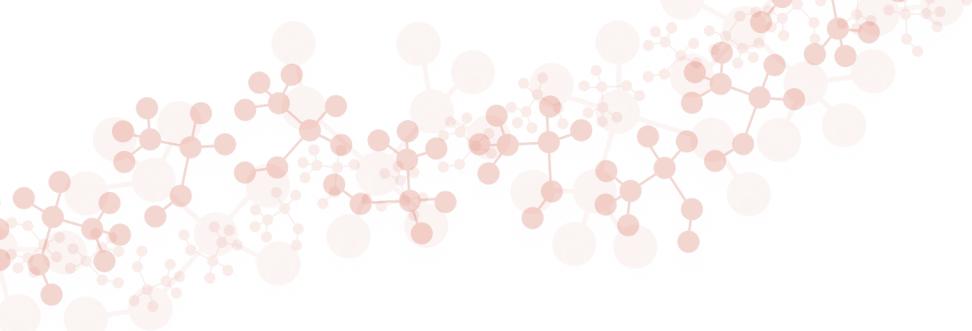
OVERALL: No overall description.



YOU'VE ESTABLISHED YOUR DESCRIPTIONS, WHAT'S NEXT?

- Start implementing **simple methods** to build up your data.
- Cataloguing and collecting data can help with:
 - Informing new product development
 - Identify trends
 - Track flavor changes





SIMPLE METHODS TO CATALOGUE AND COLLECT DATA

- **True to Target**

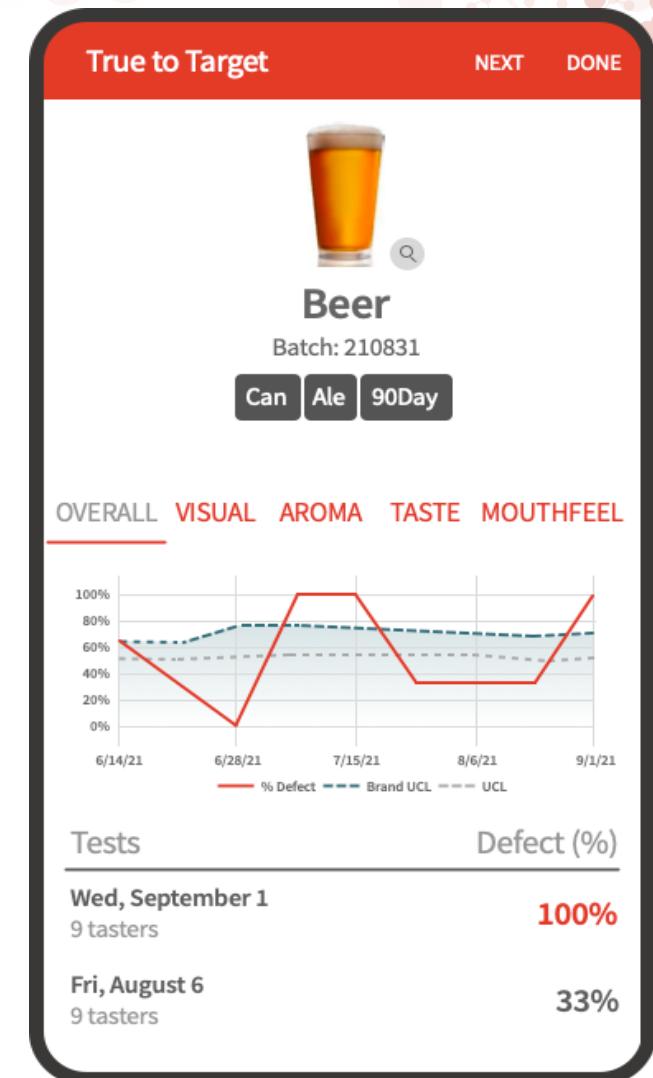


- **Hedonic**



TRUE TO TARGET TEST

- Flags samples outside of target profiles
- Compare your sample to the flavor target
- Analyze % “Not TTT” selections and comments



TTT STORY TIME...

A brewery producing over 30,000 BBLS of product per year



Created a target description for one of their core brands



They had recently started using a new lot of hops which was very prominent in this brand



The beer was overwhelmingly flagged in a TTT test for having a smoke off-flavor



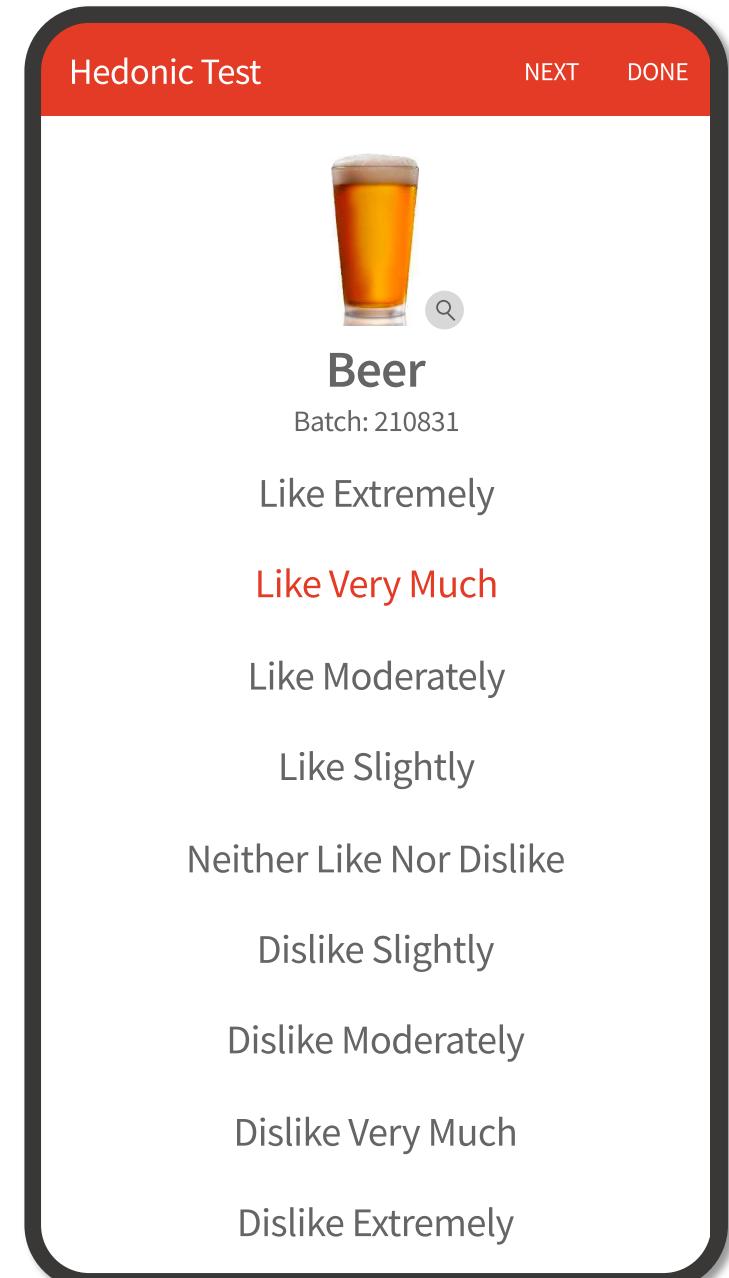
Able to trace it back to the new hop lot and switch to a new lot before the problem spread across multiple batches.

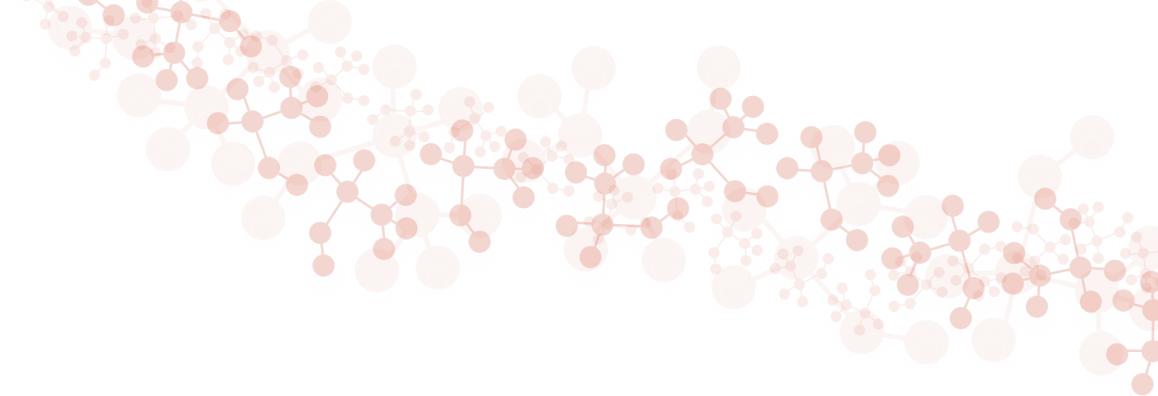




HEDONIC TEST

- Measures **Taster liking**
- 9-point scale
- Average numbers to get “liking score”
- Analyze averages to understand **preference** and **flag samples**





CONSUMER TESTING

- There are other methods and tools at your disposal.
- **Consumers!**
- Consumer feedback can be used for:
 - Market Research
 - Shelf-life
 - Quality Control
 - Consumer preference
 - New product research
 - Marketing

CONSUMER TASTINGS

- Utilize your customers
- Pop up DraughtLab tasting station with minimal equipment
- Blind tastings to get objective feedback





THE DATA THAT IS COLLECTED

👍 General idea of liking and enthusiasm towards your product

🍴 Common flavors that your consumers are picking up on



TASTING STATION CASE STUDY

- I recently ran a Tasting Station for a local brewery, they were interested in looking at the **shelf-life** of their flagship IPA
- Set up a blind tasting at their tasting room

RESULTS & DECISION

- Much to their surprise the aged sample performed better than fresh because it was less bitter.



AND REMEMBER...

- Sensory **informs** but does not decide
- You have all the tools at your fingertips
- There are simple ways to **improve** on what you are already doing
- Sensory Software doesn't have to be complicated and intimidating.





JOIN THE DRAUGTLAB COMMUNITY!

