

# Maximizing Candle Fragrance Evaluation



T. Biuso, T. Jones, J. Katz, R. Makled, A. Martingale, D. Wright

## **Background and Objectives**

#### Background

Historically candle fragrance testing, for a core assortment of fragrances, involved testing multiple

fragrances in cold mode, replicating an initial "at shelf" buying experience

#### **Objective**

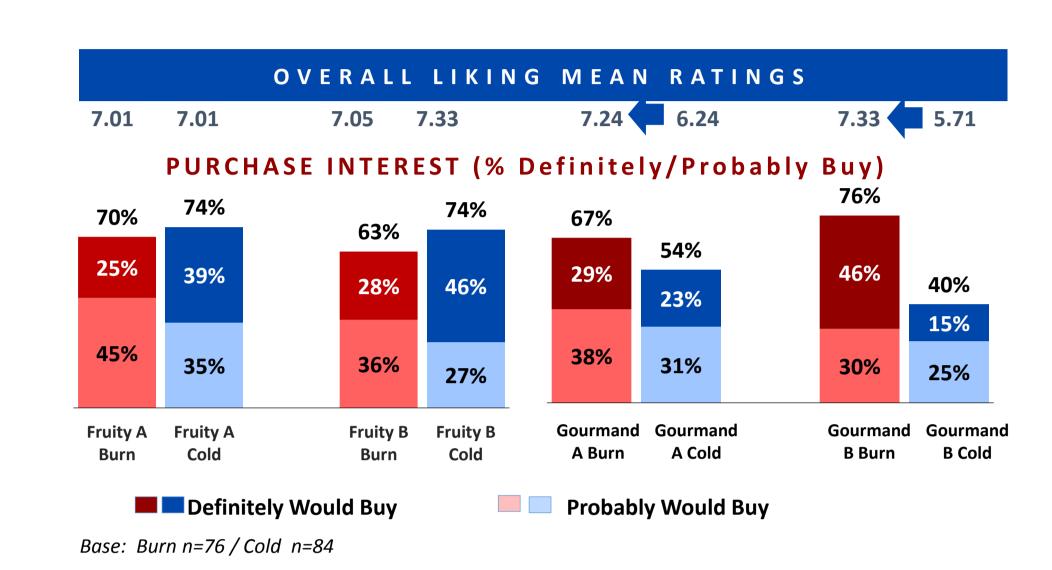
The objectives of this research were...

- to understand how sensory differences between a diffused candle fragrance in burn mode vs. cold mode may impact consumer appeal and purchase decisions
- validate that multiple candles can be tested in burn mode in one room without crosscontamination

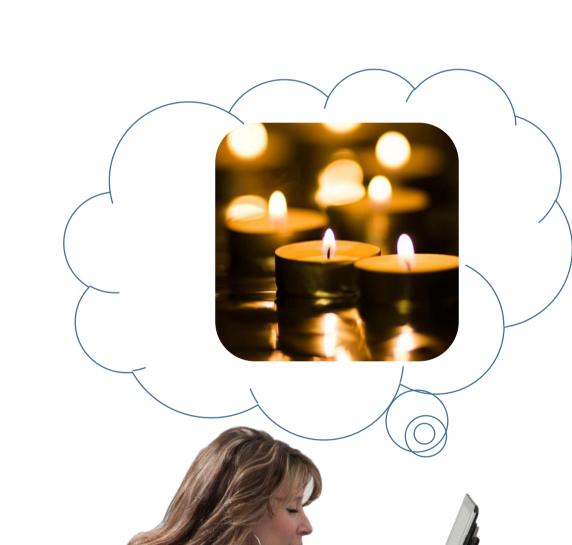


# Key Research Findings / Conclusions

- Triers like the more complex, fullbodied Gourmand fragrances dramatically more in burn mode – particularly Gourmand B
- In burn mode, Gourmand scents receive more key "definite" intent to buy



# Research Methodology



#### **Sample Description:**

- 100% Females
- Ages: 21-55

#### **Survey Instrument:**

- Overall Liking (9 Point)
- Purchase Interest (5 Point)
- Fragrance Strength (7 Point)
- Word Descriptors to uncover fragrance profile

#### **Protocol:**

- Consumers could sniff each fragrance for as long as they needed to form an opinion
- They were allowed to sniff again as needed to complete the survey
- Samples were randomized within cell to address position bias

#### **Cold Mode Methodology:**

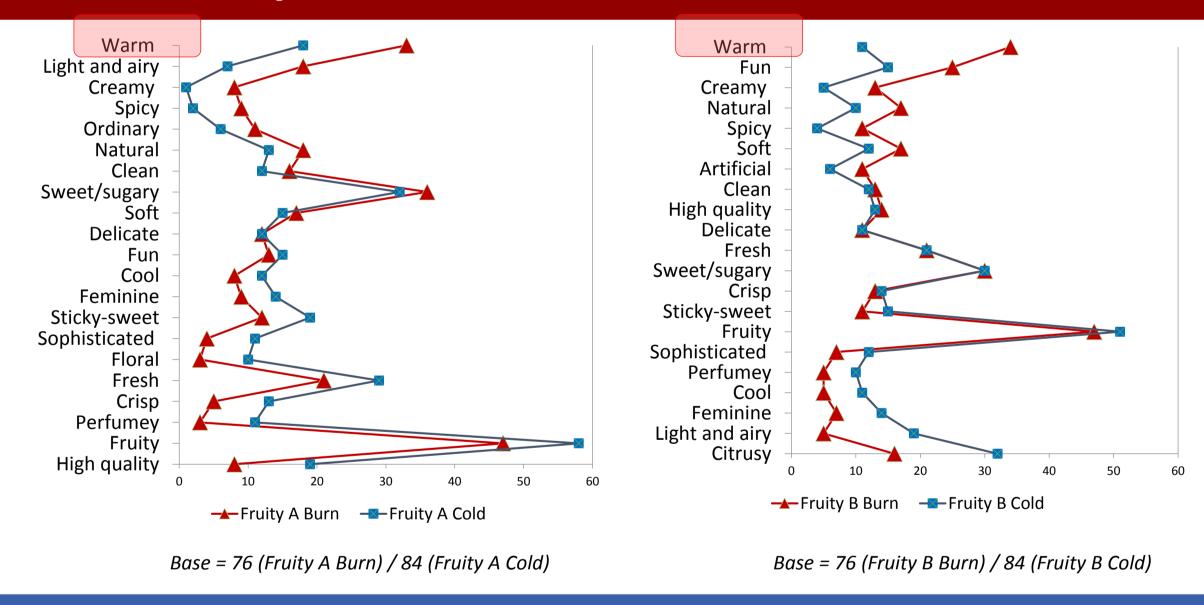
Branded, Incomplete Block Design of 12 fruit/food candle fragrances, each respondent evaluated 4 fragrances

#### **Burn Mode Methodology:**

Blinded, Complete Block, Sequential Monadic evaluation of 4 fruit/food candle fragrances

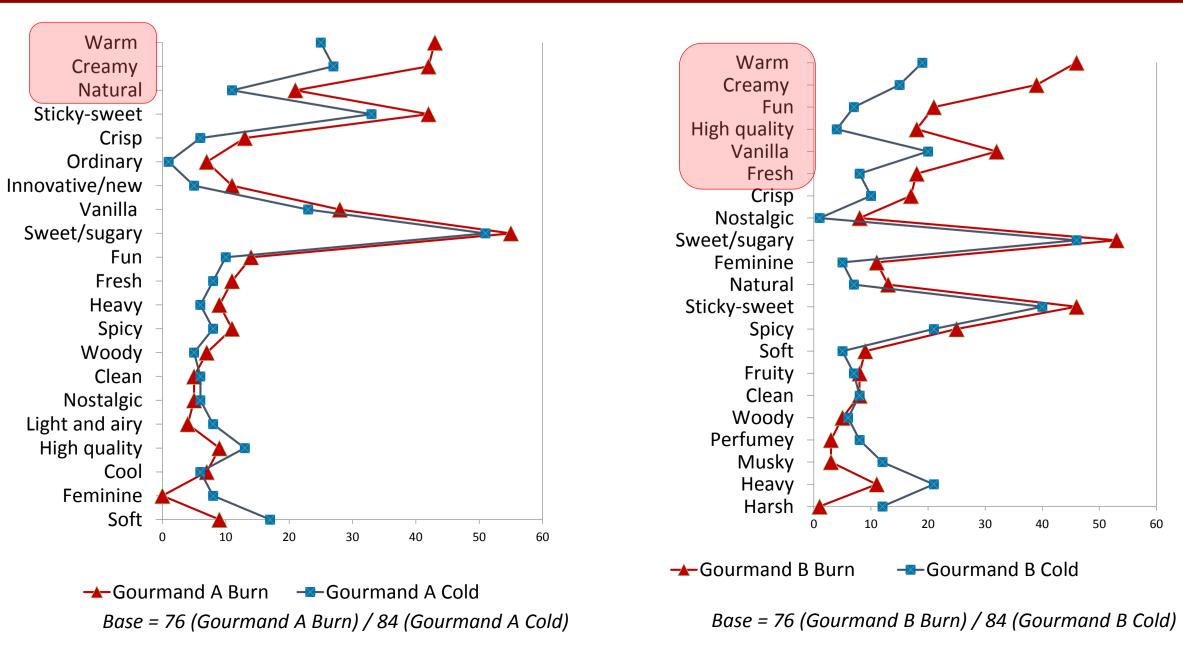
### **Fruity Line Chart**

While the fragrance descriptors trend similarly in cold and burn mode, when burned the Fruit scents have a somewhat more pronounced personality



# **Gourmand Line Chart**

The two gourmand fragrances also trend similarly, however, they both demonstrate a much more complex and intense profile in burn mode



### Implications



**Goal 1:** Understand sensory differences between burn and cold candle fragrances to determine how this may impact consumer acceptance of the fragrance.

**Implications**: While the fragrance descriptors that characterized each fragrance in the usual cold mode testing environment did not change in burn mode, the burn mode displayed a more complex and pronounced aroma.

This greater diffusivity of the Gourmand fragrances may account for the marked increase in definite intent to buy and more appealing aroma.

**Goal 2:** Obtain Hedonic evaluation of 4 candles in burn mode without cross contamination using portable olfactive devices (PODs).

Implications: Four candles in burn mode were evaluated, each in a separate POD, in the same room, without any cross contamination.