



SENSIENT®

# Trueboost Mouthfeel

Clean Label Conference, May  
24-25, 2022

# What is Flavor?

Nose

Mouth

Tongue

Aroma

Somatosensory

Taste

Roasted

Floral

Fuity

Earthy

Heat/cool

Tingling

Astringency

Salty

Sweet

Bitter

Sour

Umami

# Somatosensory

**Somatosensory; the perception of touch, driven by a set of receptors responsible for sensing pain, temperature and tactile stimulation**

## Macromolecules

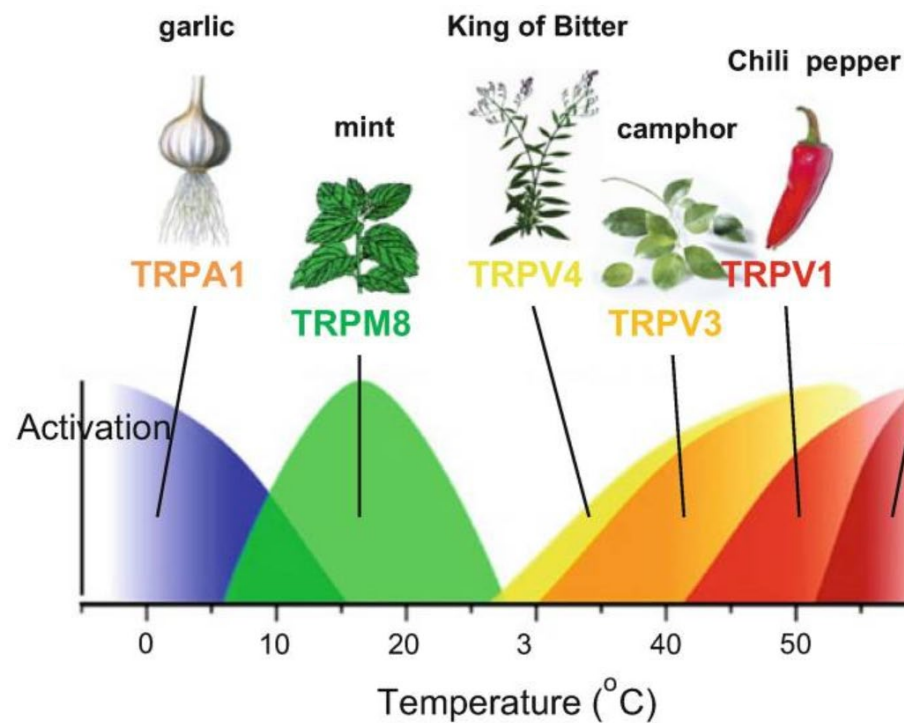
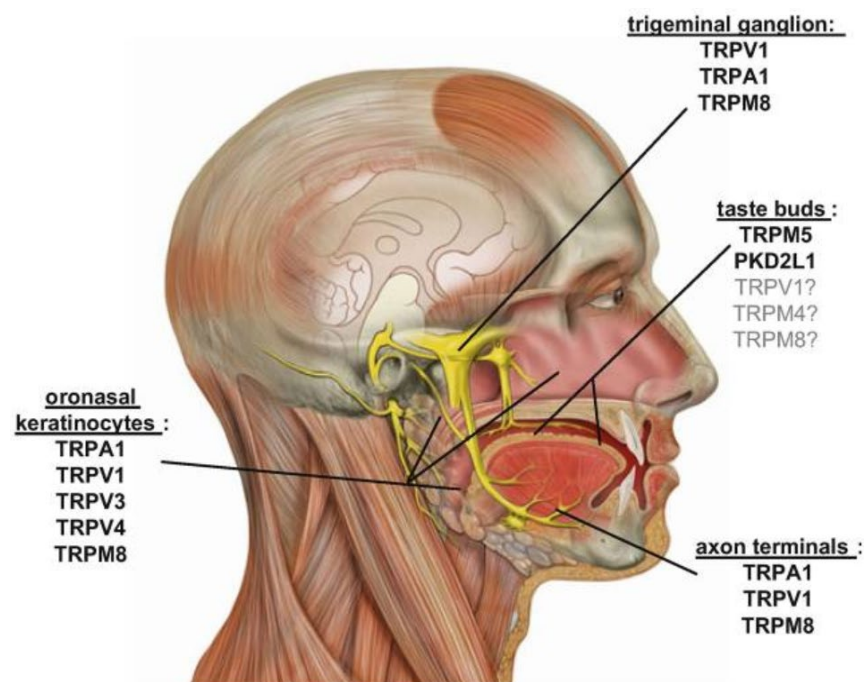
Large molecules such as carbohydrates and fats that cause a physical change of the matrix

## Micromolecules

Mediated through TRP channels

# Somatosensory

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Roper SD. TRPs in taste and chemesthesis. *Handb Exp Pharmacol.* 2014;223:827-871.

## What is Trueboost Mouthfeel?

TrueBoost Mouthfeel is our label-friendly solution to add a **desirable mouthfeel** perception to dairy/non-dairy products.

For example:

- Dairy
- Creamy
- Fatty
- Sweet Aromatics



# Trueboost Benefits

- Designed to deliver a premium dairy, milky, fatty flavor, and create the mouthfeel sensation of a true dairy profile.
- Made from FEMA GRAS approved natural flavor ingredients and label friendly carriers.
- Non-GMO
- No allergens
- Kosher, Halal, and Vegan suitable
- Easy to use in applications.



# Trueboost Mouthfeel Characteristics

- **TRUEBOOST MOUTHFEEL MILKY**

- Oil soluble liquid
- Ingredient statement: High Oleic Sunflower Oil, Sunflower Oil, Natural Flavor
- Typical use rate: 0.05-0.50%

- **TRUEBOOST MILKY NAT SD**

- Water miscible spray dry
- Ingredient statement: Organic Maltodextrin, Vegetable Oil (sunflower oil), Gum Arabic, Natural Flavor
- Typical use rate: 0.05-0.50%

- **TRUEBOOST MOUTHFEEL FATTY**

- Water miscible spray dry
- Ingredient statement: Maltodextrin, Gum Acacia, Triacetin, Natural Flavor, Silicon Dioxide
- Typical use rate: 0.05-0.50%

# Applications



Ice Cream



Yogurt



Protein Milk Beverage



Sauce



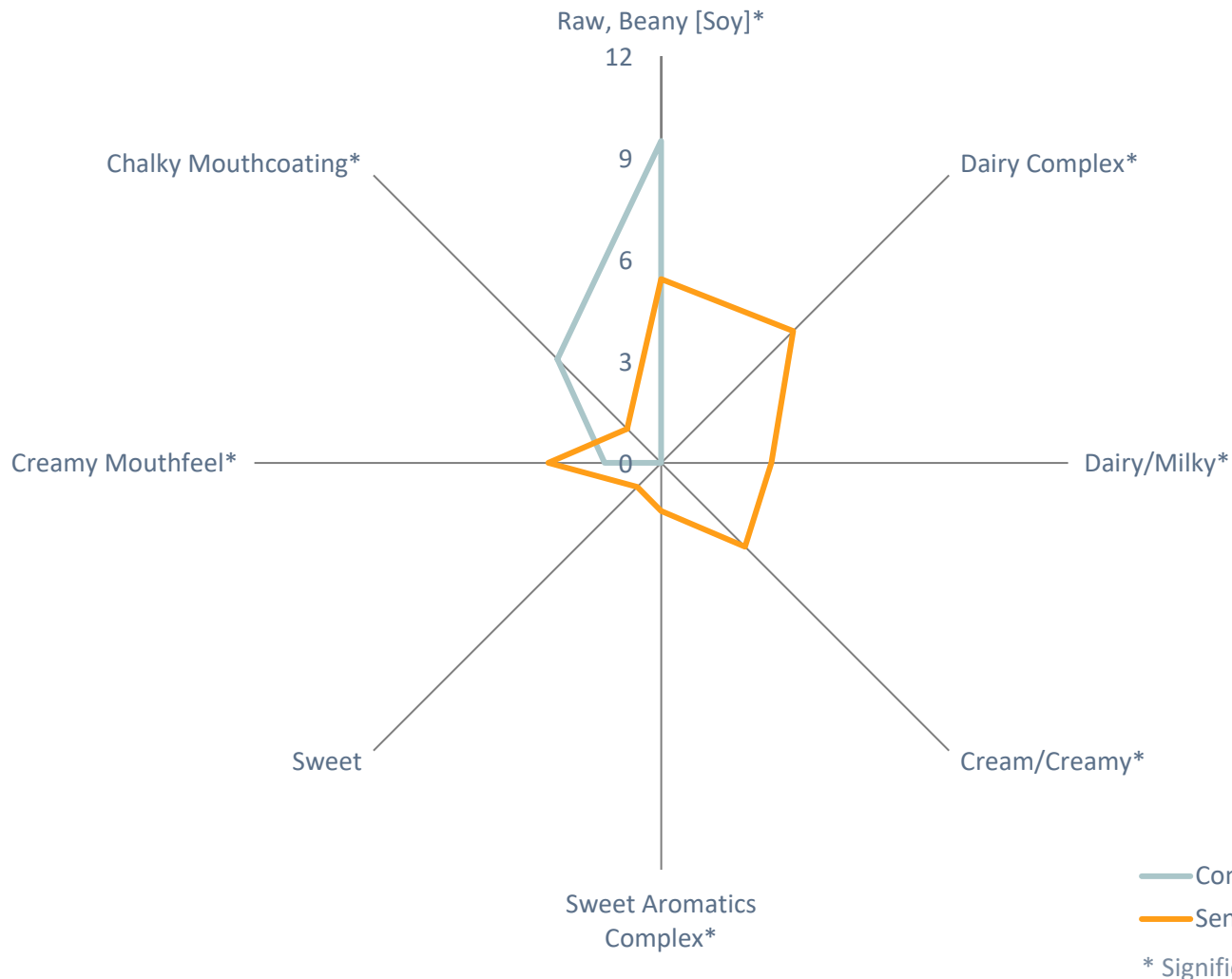
Cream



Bakery



# TrueBoost Mouthfeel in Soy Based Milk



Sensient Prototype exhibits:

- ✓ Significant reduction in Beany off notes and Chalky Mouthcoating
- ✓ Significant enhancement in Dairy Complex, Dairy/Milky, Cream/Creamy, and Sweet Aromatics as well as Creamy Mouthfeel



Questions?

# Somatosensory

**Somatosensory; the perception of touch, driven by a set of receptors responsible for sensing pain, temperature and tactile stimulation**



Astringency of whiskey  
attributed to Vescalagin,  
castalagin, grandinin, roburun



Fatty texture and mouthcoating  
attributed to orotic acid,  
pantothenic acid, hippuric acid

Glabasnia, A., Hofmann, T. Sensory-Directed Identification of Taste-Active Ellagitannins in American (*Quercus alba* L.) and European Oak Wood (*Quercus robur* L.) and Quantitative Analysis in Bourbon Whiskey and Oak-Matured Red Wines. *J Agric Food Chem.* 2006, 54, 3380-3390.

Potts, P., Peterson, D. Identification of small molecule flavor compounds that contribute to the somatosensory attributes of bovine milk products. *Food Chemistry.* 2019, 294, 27-34.