

## WHY IS THIS IMPORTANT?

Sweeteners and sweetness enhancers (S&SEs) include noncaloric sweeteners and food additives, which enhance perceived sweetness of food and beverages.



In recent years there has been a shift towards natural sweeteners (e.g. stevia) and away from artificial sweeteners (e.g. aspartame).



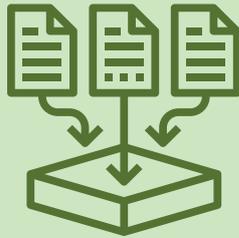
Social media can play an important role in influencing consumer acceptance (and uptake) of sweeteners and sweetness enhancers.

## WHAT DID WE DO?

### DATA COLLECTION

-  Data Mining +
-  Digital Ethnography

were carried out in English and Spanish national languages.  



### DATA SAMPLE

 45,753 

 15,130   
Tweets were collected in national languages.

 343  317 

Aspartame posts were collected in national languages.

 255  164 

Stevia posts were collected in national languages.

### DATA ANALYSIS

Thematic and Sentiment Analyses were carried out across all data sets and in both languages.



100%  
Automatic coding



≥ 10%  
Manual coding

## WHAT DID WE FIND?

Across Facebook and Twitter, in both languages, **natural sweeteners** (e.g. stevia) were associated with a **positive** sentiment and perceptions of health benefits (e.g. natural and sugar substitute, helps weight loss).



**Artificial sweeteners** (e.g. aspartame) were associated with **negative** sentiment and perceptions of health risks (e.g. poisonous, toxic) Although there were some benefits described (e.g. diabetes management).



 On Twitter, 80% of those in conversations on sweeteners are female.

However, 73% of those discussing aspartame are male.



**Auto coding** is less accurate than manual coding especially for Twitter. Combining manual and automatic sentiment analyses is recommended for sweetener related public generated content on social media.

## WHAT ARE THE POLICY IMPLICATIONS?



When cross-compared across social media platforms and triangulated against the traditional media analysis (mass-media-analysis conducted by University of Surrey)\*, the results can provide information about emerging/established citizen perceptions of risk and benefit associated with different types of S&SEs, as well as identification of opinion leader debate on these issues.



Subsequently, social and mass media perceptions of S&SEs can be synthesized alongside other stakeholder perceptions (from SWEET-WP6)\* to bring a societal approach to identification of the barriers & facilitators to increased S&SE intake and inform the development of an industry Decision Support Tool. Through this tool, SWEET will support responsible development & use of S&SEs in consumer acceptable high impact foods.

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