

# Emotional consumers prefer unusual flavours

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## Introduction

Final consumer decision-making process is linked to type of food product evaluated and it is influenced by consumers' emotions.

AIM:

To find out whether emotionally driven people have higher sensory preference for a new cookie with a strong and unusual rosemary flavour over a typical chocolate cookie.

## Materials & methods

RESPONDENTS: 72 consumers in Flanders

PRODUCTS:

- two new chocolate cookies: one with a strong and one with no rosemary flavour
- one commercially available chocolate cookie

RESEARCH STEPS:

### • Segmentation

- ✓ 13-item version of the Emotional Eating scale is used for finding emotions-related segments (Van Strien et al. 1986)
- ✓ measured on 5-point scales

### • Sensory liking, WTB & eating frequency

- ✓ 7-point hedonic scale: overall liking for colour, smell and taste
- ✓ 5-point scale for willingness-to-buy (WTB)
- ✓ 6-point scale for frequency of consuming cookies

### • Socio-economic profiles of segments

- ✓ gender, age, income, education, BMI

ANALYSIS:

- ✓ Factor, cluster, discriminant analyses
- ✓ one-way ANOVA

Reference:

Van Strien, T., Frijters, J. E. R., Bergers, G. P. A. & Defares, P. B. (1986). The Dutch Eating Behavior Questionnaire (DEBQ) for assessment of restrained, emotional, and external eating behavior. *International Journal of Eating Disorders*, 5, 295–315

## Results

### 1. Emotional segments

#### 1.1. Factor analysis

EMOTIONAL EATING SCALE (Van Strien et al., 1986)	Factor 1 Negative feelings/depression, irritation, anger, fear	Factor 2 Loneliness and being bored
Do you have a desire to eat when ...?		
1. ... things are going against you or have gone wrong?	<b>0,857</b>	0,319
2. ... you are anxious, worried or tense?	<b>0,816</b>	0,006
3. ... you are cross?	<b>0,781</b>	0,319
4. ... you are approaching something unpleasant to happen?	<b>0,761</b>	0,224
5. ... somebody lets you down?	<b>0,724</b>	0,462
6. ... you are frightened?	<b>0,700</b>	0,002
7. ... you are irritated?	<b>0,672</b>	0,449
8. ... you are disappointed?	<b>0,659</b>	0,447
9. ... you are depressed or discouraged?	<b>0,651</b>	0,538
10. ... you are emotionally upset?	<b>0,650</b>	0,516
11. ... you have nothing to do?	0,005	<b>0,859</b>
12. ... you are bored or restless?	0,272	<b>0,714</b>
13. ... you are feeling lonely?	0,596	<b>0,618</b>

68% of total variance explained

#### 1.2. Cluster and discriminant analyses



### 2. Sensory liking of rosemary cookies

Overall liking	High-moods	Low-moods	p-value
Cookie without rosemary 551	3,97	4,08	0,572
Cookie with rosemary 986	<b>4,53</b>	<b>3,08</b>	<b>0,052</b>
Cookie commercial 173	3,79	3,92	0,564

### 3. Willingness to buy and frequency of consumption

- ✓ High-moods indicate higher WTB scores for the cookie with rosemary
- ✓ Frequency of consuming chocolate cookies is not relevant between segments

### 4. Emotional consumers' profiles

- ✓ 75% of females belong to the high-moods segment
- ✓ People with higher BMI are driven by negative feelings
- ✓ Age, income and education are not relevant

## Conclusions

The Emotional Eating Scale allows to segment people into 'high-moods' and 'low-moods' groups.

High-moods are people who are driven by both 'negative feelings, such as depression, irritation, anger and fear' and 'loneliness and being bored'. Women and those with higher body mass index are major representatives of 'high-moods'.

A strong unusual rosemary flavour in the chocolate cookies is accepted only by the respondents belonging to the 'high-moods' segment.

