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## **On farm processed foods: opportunities for product management based on sensory preferences**

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# On farm processed foods : opportunities for product management based on sensory preferences

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## INTRODUCTION & OBJECTIVE

CAP -> rural economy becomes more important  
-> financial support for on farm processing

But : product development, innovation = additional task for the farmer

**Objective :** -> Sensory analysis = useful tool ?  
-> marketing conclusions ?

## RESEARCH METHODOLOGY

1. Descriptive sensory analysis -> trained panel

- \* H1 : each product is different
- \* H2 : farm products are different, but no typical sensory characteristics
- \* H3 : variability can technically be explained

2. Consumer preferences -> 9 point hedonic scale

3. Preference mapping -> stepwise multiple regression

## IMPLEMENTATION : SKIMMED YOGHURT

QDA : 11 panellists - 8 sessions - 8 products (19 descriptors) - ANOVA

Preference : 192 respondents -> 50% industrial - 50% farm ; Latin square

## DESCRIPTIVE SENSORY ANALYSIS

H1 : accepted because for at least one descriptor significant difference

H2 : rejected because sensory characteristics of farm products are different, but common, typical sensory characteristics exist :

Descriptors	F-value	p	Product codes			
			low score			high score
APPEARANCE						
whiteness	6,49	0,00	F <sup>a</sup>	F <sup>a</sup>	I <sup>b</sup>	A <sup>b</sup>
TEXTURE ON SPOON						
firmness	6,17	0,00	F <sup>a</sup>	F <sup>b</sup>	A <sup>b</sup>	I <sup>b</sup>
cohesion	5,90	0,00	F <sup>a</sup>	F <sup>b</sup>	A <sup>b</sup>	I <sup>b</sup>
ODOUR						
odour intensity	9,24	0,00	F <sup>a</sup>	F <sup>ab</sup>	A <sup>bc</sup>	I <sup>c</sup>

1. Products within a line showing the same superscript are not significantly different in the Duncan test ( $p < 0,00$ )

H3 : accepted because of differences in technique used (starter cultures, fermentation time and  $t^\circ$ ), in raw material (feed and breed)

Figure 1 : Consumer preferences

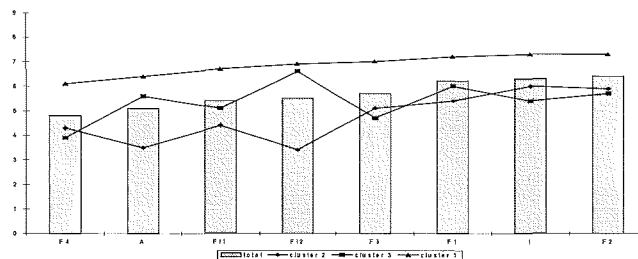
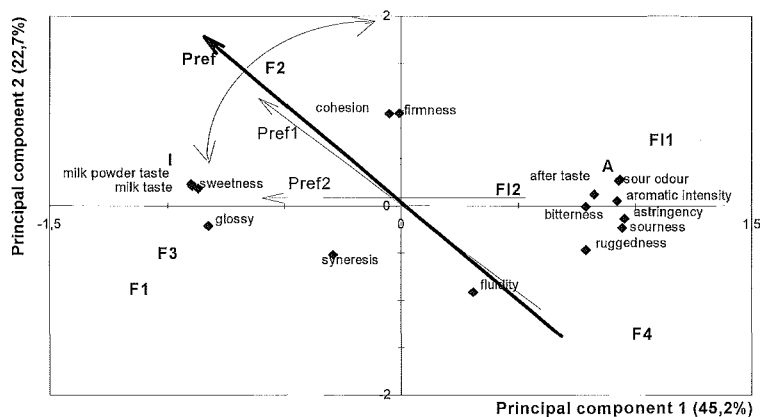


Figure 2 : Preference mapping

$R^2 = 90\%$  ; -> firm + cohesive ; sweet + milk/powder taste



## CONCLUSION

- ☞ cluster 3 = not linear, positive side PC1 = more sour
- ☞ CAP = opportunities on farm processing, but...

- ☞ Sensory is limited to the product, what about other elements of marketing-mix ?
- ☞ sensory = start not the end, because consumers like not what they eat, but like what they think they eat

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