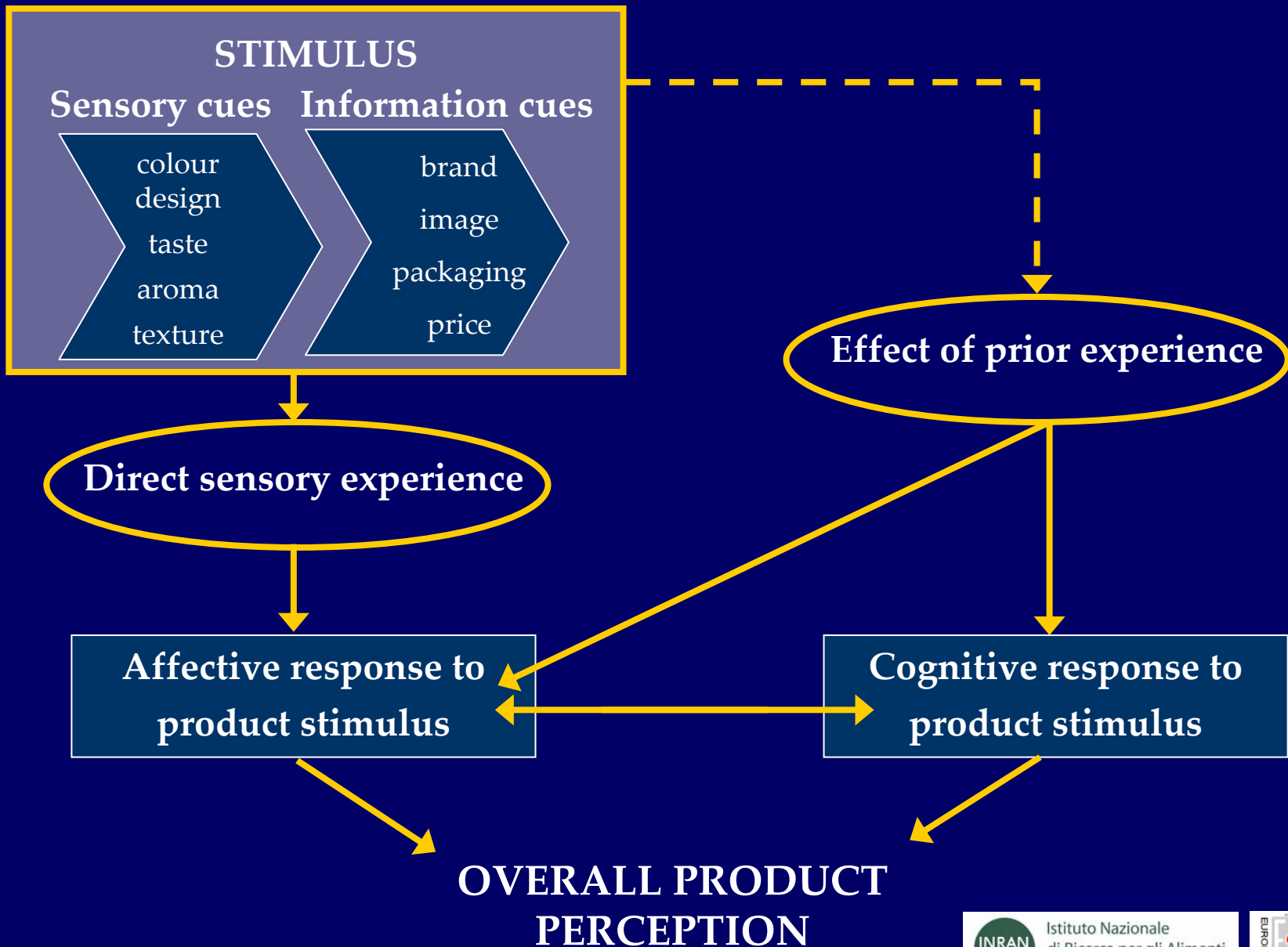


How consumer preferences in foods are led by sensory perception

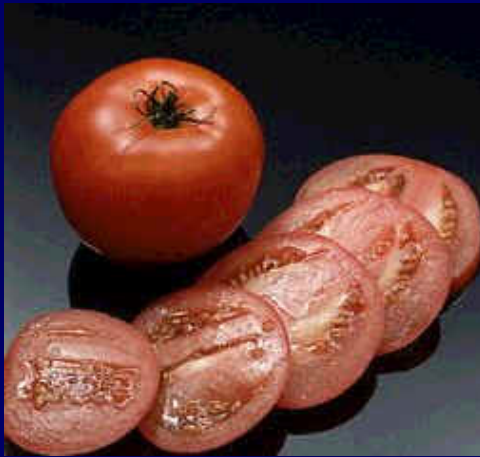
Fiorella Sinesio

INRAN, Istituto Nazionale di Ricerca per gli Alimenti e la Nutrizione



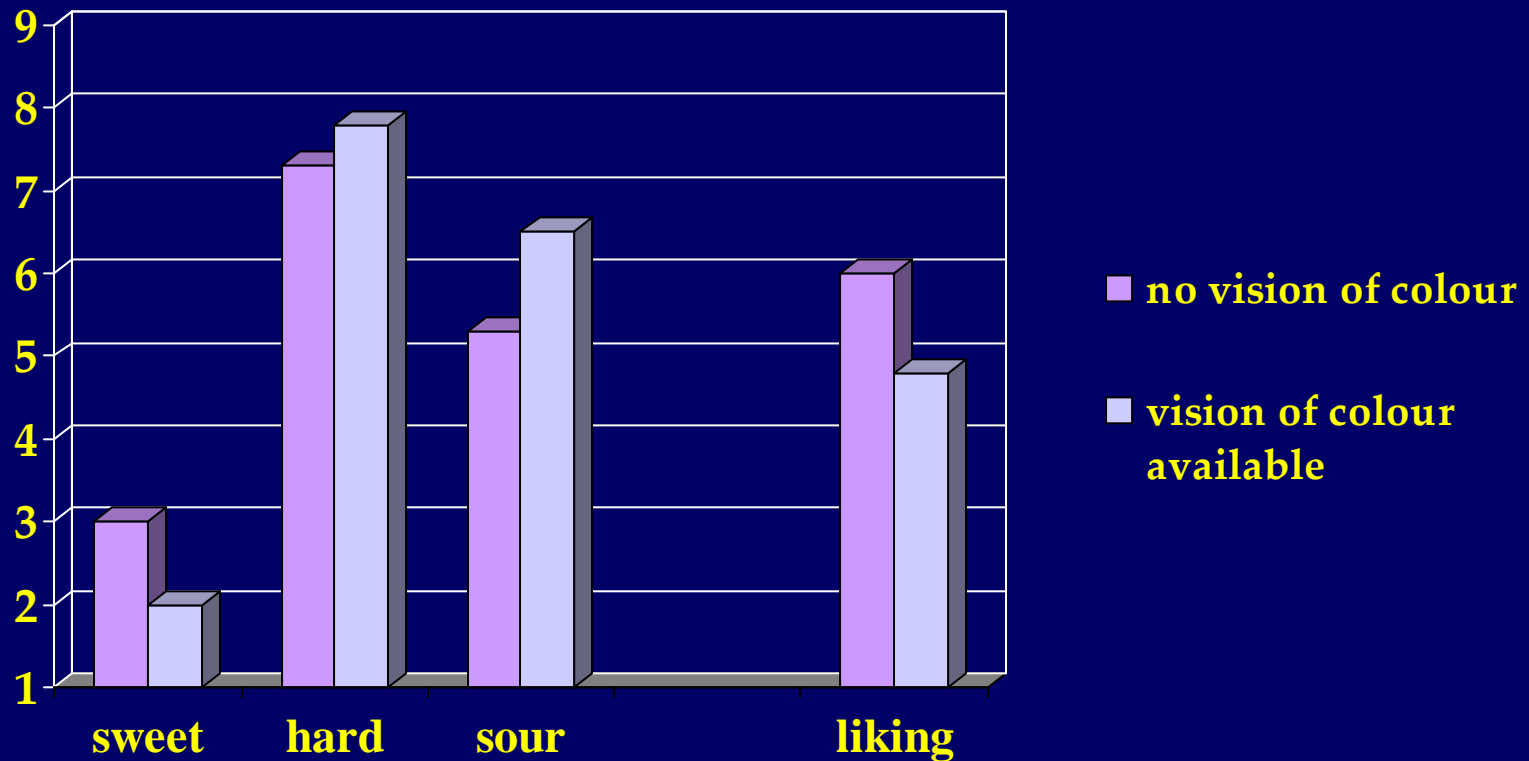
Colour of food

- ✓ *Is a sensory experience*
- ✓ *Has a symbolic or associative meaning*
- ✓ *Can frame expectation of the sensory properties of foods before they are tested*
- ✓ *In fruits and vegetables it can indicate ripeness, sweetness, texture, fruity aroma and flavour*



Intensity rating of sensory cues and liking

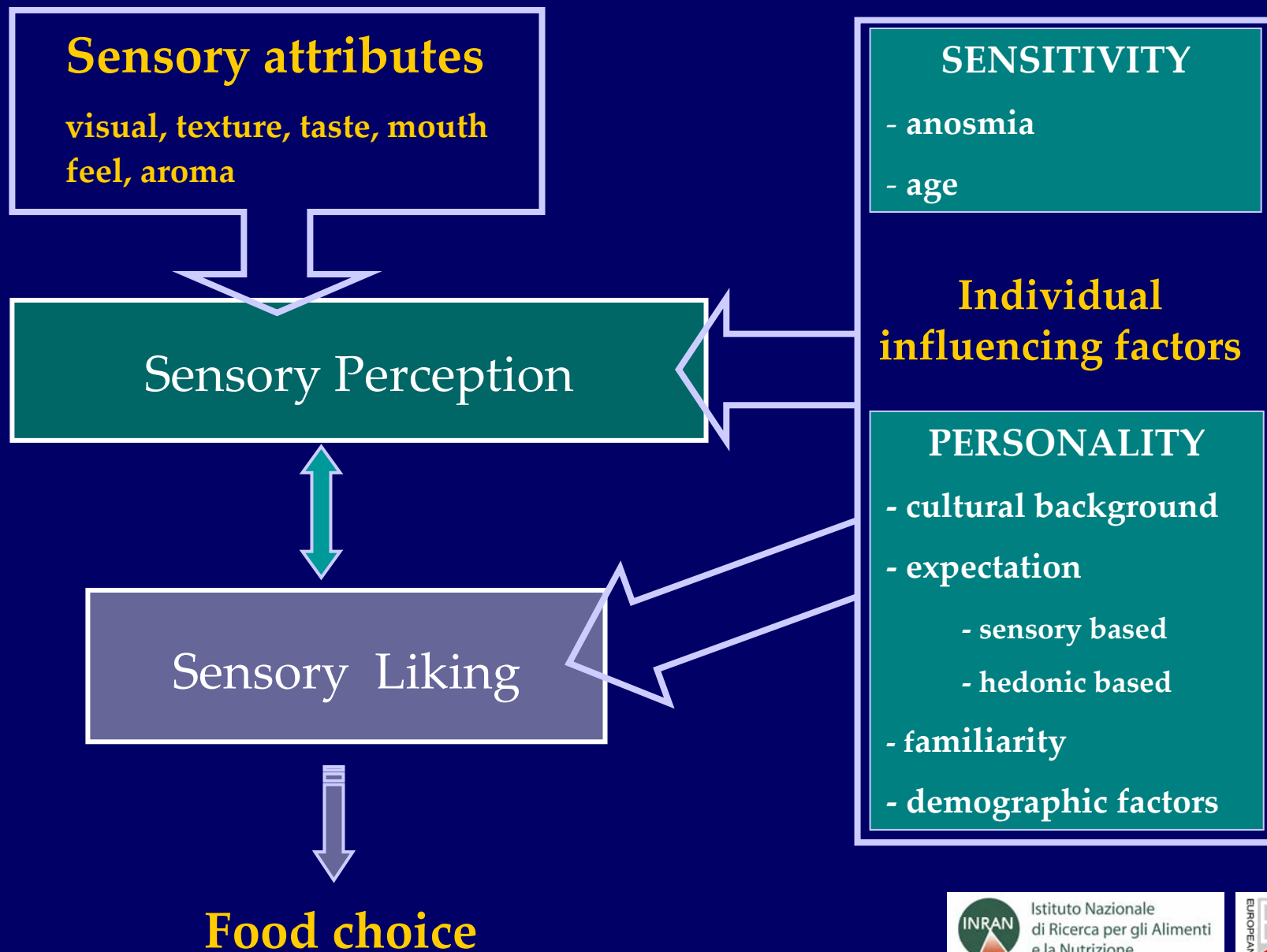
- Effect of colour vision -



Weight of sensory and cognitive components in the affective response to a stimulus

There are three different ways of processing that can generate affective response to a stimulus:

- 1) A direct affective response to the sensory stimulus
 - **Not involved the recall of previous affective information about the stimulus**
- 2) An affective response to the match between the sensory stimulus and the cognitive components associated with the stimulus
 - **Feeling and thinking are integrated**
- 3) An affective response to stimulus meaning beyond its physical features
 - **Implies a complex process of categorization of the stimulus and high cognitive effort**



- How to measure preferences -

- Verbal measures of the affective dimension, the sensory acceptance (**overall liking, attribute liking**)
(e.g. like/dislike)
- Behavioural measures (**choice, behaviour, intake**)
(e.g. always choose / never choose
always buy / never buy)

Labelled Affective Magnitude (LAM) Scale

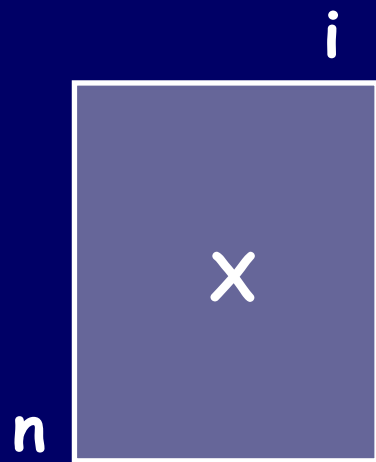


Schutz and Cardello, 2001

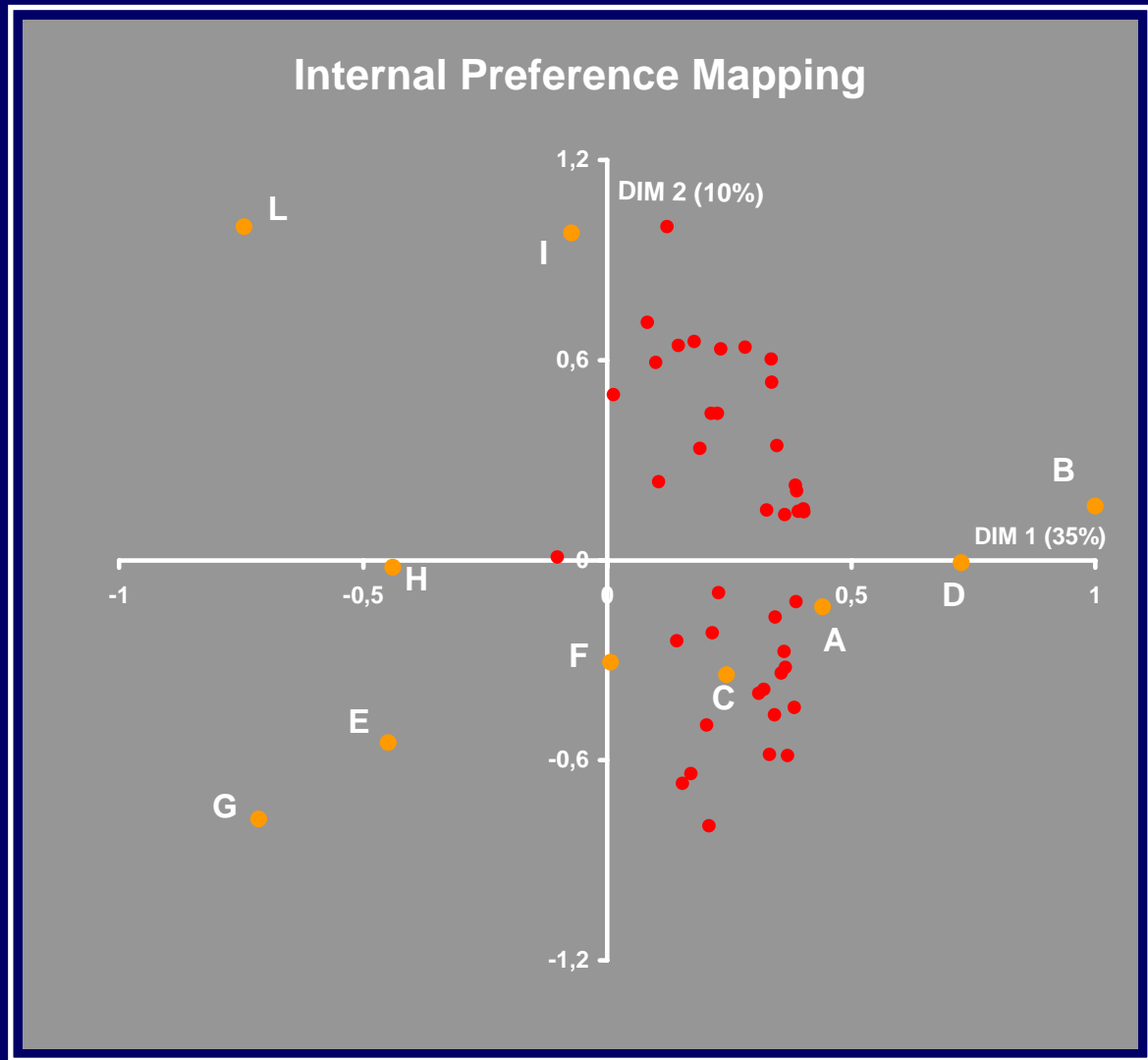
9-point Hedonic Scale

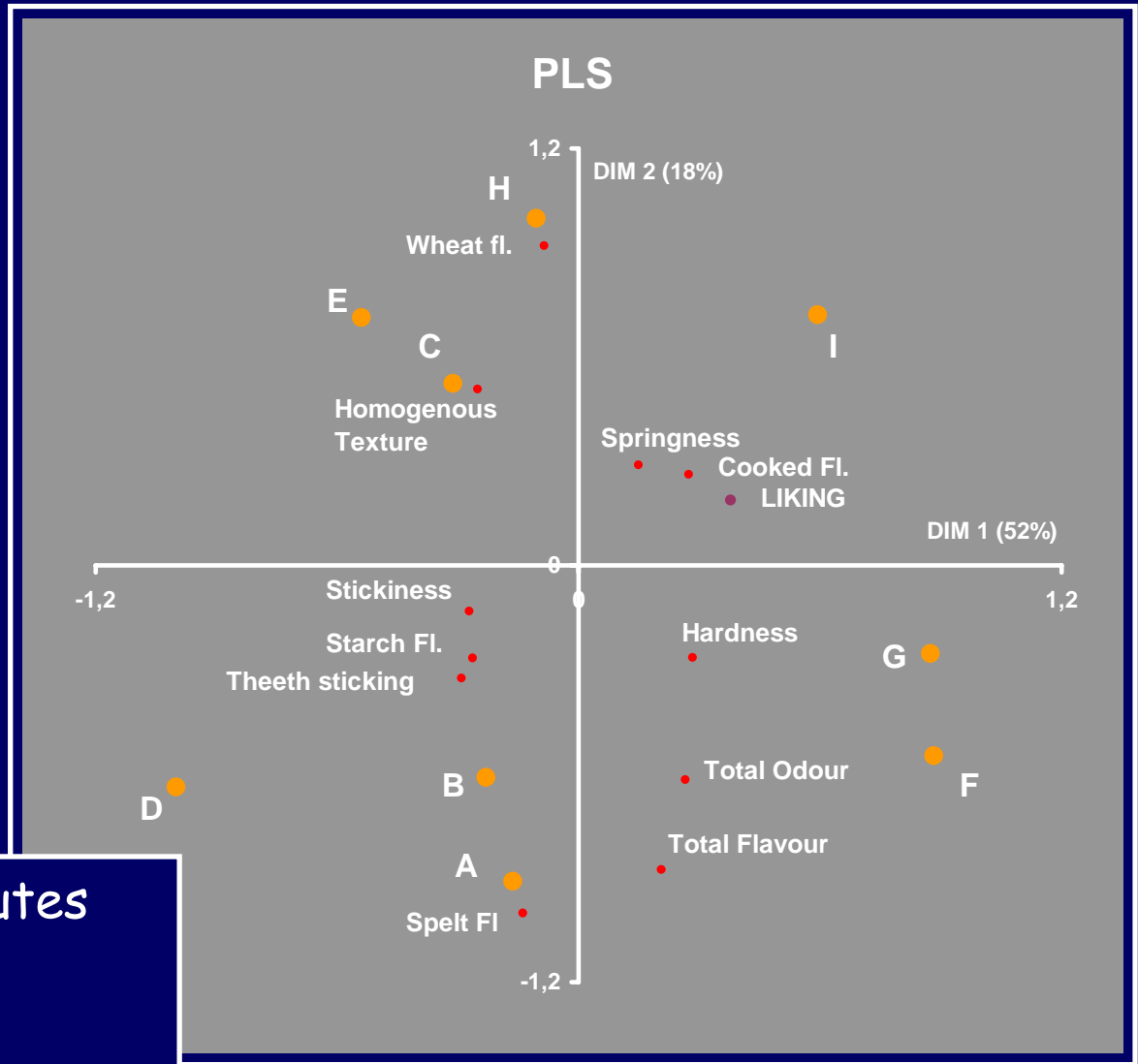
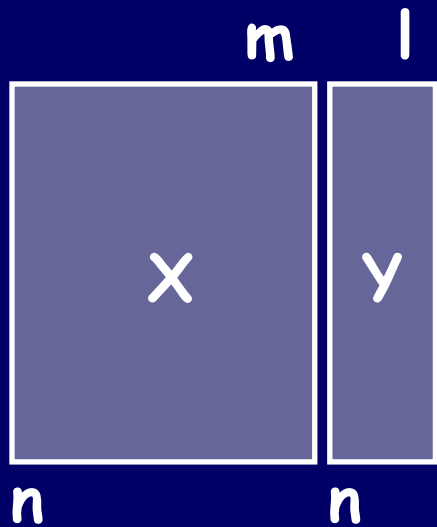
1. Like extremely
2. Like very much
3. Like moderately
4. Like slightly
5. Neither like nor dislike
6. Dislike slightly
7. Dislike moderately
8. Dislike very much
9. Dislike extremely

Peryam and Pilgrim, 1957



$i = \text{consumers}$
 $n = \text{samples}$





m = sensory attributes
 l = overall liking
 n = samples

- Hedonic questionnaire design -

Questions on:

- Overall liking dislike – like
- Attribute liking dislike – like
- Intensity rating low – high
- Just about right too low – just right – too high

First impression or repeated exposure in hedonic sensory measurements?

- Important statements -

- Consumer preferences are complex functions of sensory acceptability derived at the act of eating and also formed from previous sensorial experiences with the product and by beliefs based on information about a food's taste or other attributes
- The impact of the psychological state and expectation (based on sensorial, emotional, and social experiences) is an important factor
- Individuals do not remain stable in their appreciation over exposure to the stimulus. Therefore, first impressions are not good predictors of liking.
- The relative importance of sensory characteristics in influencing overall acceptability varies between individuals