

SEGMENTING CONSUMERS BASED ON THEIR PERCEPTION OF AN IDEAL APPLE AND SUBSEQUENT APPLE CHOICES

INTRODUCTION

Consumers differ in their preference for apple cultivars available in the market. Individual definitions of an ideal apple were used to explain how the appreciation of apple properties predicts preferences and actual choices.

RESULTS

Almost 90% of the respondents ate domestic apples regularly during the season. Women consumed more domestic apples and were more involved in domestic apples than men, but otherwise the differences between genders were small. The mean liking scores reflected selected cultivars (Table 1).

Table 1. Mean liking of the cultivars according to the cultivar selected for home use (n=108). The cultivar selected in rows, the liking of that cultivar in bold (based on 3 x 108 evaluations).

Cultivar Selected	Aroma	Eva-Lotta	Pekka	Red Atlas
Aroma	5.9	4.7	4.1	4.2
Eva-Lotta	4.9	5.8	4.4	3.7
Pekka	4.6	4.5	5.8	3.3
Red Atlas	5.3	5.1	4.1	5.6

Three consumer segments (Fig. 2) were identified (n=102):

- **Cluster 1** (n=22) preferred sweet and soft apples; valued fresh and organic apples; and was involved with domestic apples.
- **Cluster 2** (n=36) preferred medium sour apples; wanted inexpensive apples; was more eager to switch between cultivars; and had the highest CSI.
- **Cluster 3** (n=44) preferred sour and firm apples; valued fresh and organic apples; was involved with domestic apples; and continued choosing the same cultivar more often.

The most liked cultivar was not always chosen for home use (Table 2). 24 respondents chose each time the same cultivar, while 28 chose every time a different cultivar.

Table 2. The mean liking of the cultivars in each cluster (n=102). The figures in brackets indicate how many times each cultivar was selected for home use during the three evaluation days.

Cultivar Cluster	Aroma	Eva-Lotta	Pekka	Red Atlas
1 (n=22)	5.1 (22)	4.8 (19)	4.7 (21)	3.4 (4)
2 (n=36)	5.3 (41)	5.2 (24)	5.0 (34)	4.0 (9)
3 (n=44)	5.4 (72)	4.9 (28)	4.1 (13)	4.3 (19)

CONCLUSION

Apple eaters were clustered into three groups, characterised by their preference for 1) **Sweet and soft**, 2) **Medium sour** or 3) **Sour and firm** apples. Liking reflected the clusters but respondents also chose less preferred cultivars to take home. The results indicate the importance of variety of apples available to satisfy varying individual preferences.

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Figure 1. Apple cultivars were presented with brand names to the respondents. From left to right:

1. 'Aroma'
2. 'Pekka'
3. 'Eva-Lotta'
4. 'Red Atlas'.

DATA COLLECTION

APPLES

Four commercially available domestic cultivars were chosen to represent variation in Finnish apples (Fig. 1):

- 'Aroma' is crispy, medium sweet and medium sour
- 'Eva-Lotta' is crispy, sweet and slightly sour
- 'Pekka' is sweet, low in sourness and its texture is mealy
- 'Red Atlas' is medium crispy, sour and low in sweetness.

RESPONDENTS

The data were collected at two working places in Helsinki:

- 108 (68%) completed the study, 77 female, 31 male.
- Descriptions of ideal apple from 102 respondents.
- Mean age was 45, range 19-65 years.

PROCEDURE

- The participants rated the importance of 14 attributes (ideal apple).
- Frequency of apple consumption, involvement with domestic apples and apples in general, and change seeking (CSI) were measured.
- Liking of the four cultivars was rated three times during one week (Mon-Wed-Fri).
- Each time they chose three fruits from one cultivar to take home.

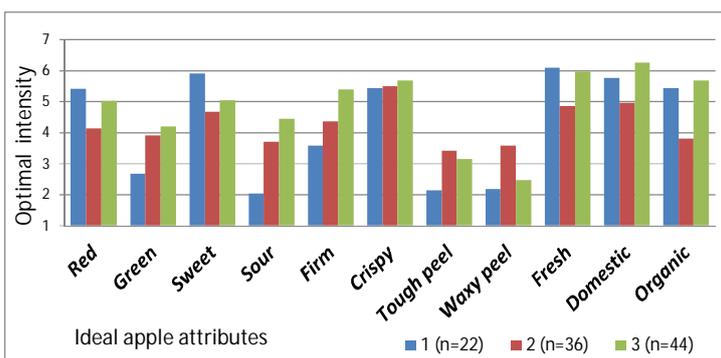


Figure 2. Three clusters, based on respondents' opinions of their optimal apple, measured with 11 sensory and origin related attributes (n=102). Three attributes (size, cultivar and price) were excluded from the graph.