



UBC APPLE FESTIVAL – 2010

Exploring Urban Consumer Preferences for Apple Cultivars

**Project Report: Developing Innovative Agri-Products (DIAP) Program
Sensory Evaluation – Consumer Research
Dec 10, 2010**

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Executive Summary

This research 1) explored the influence of ethnicity, gender, age and usual apple choice ('sweet' or 'tart') on hedonic (degree-of-liking) scores for metropolitan consumers and 2) assisted the PARC apple breeding program with cultivar selection and release.

Taste and visual assessment were conducted on three apple cultivars (Ambrosia™, SPA493, Honeycrisp™) at the UBC Apple Festival (Oct 16-17, 2010) (Vancouver BC) by 1469 consumers (n=1469). Consumers who participated in the study were 61% European, 29% Asian and 10% other. They were 66% female and 33% male and their ages were distributed approximately equally across all age groups (19-29, 30-39, 40-40, 50+ years).

Eighty-eight percent of Asian consumers identified themselves as 'sweet' apple eaters, while European consumers indicated themselves as both 'sweet' (55%) and 'tart' (45%) apple eaters. The 'sweet' apple eaters of both ethnicities (n=710) scored 'sweet' apples cultivars (Ambrosia™) significantly higher than 'tart' apple cultivars (SPA493), while 'tart' apple eaters (n=367) scored 'tart' apples significantly higher than 'sweet' apples. Consumer choice is consistent with their stated preference which plays a role in cultivar liking.

Consumers' ethnic origin also influenced the hedonic taste score for new apple cultivars. While mean scores for 'sweet' apples (Ambrosia™) for Asian and European consumers were not significantly different, Asian consumers gave significantly lower scores to 'tart' apples (SPA493). This suggested that some apple cultivars are more appropriately marketed to selected consumers within a metropolitan market.

Interestingly both Asian (n=305) and European (n=398) 'sweet' apple eaters scored the visual appearance of red apples with a yellow-green base colour significantly lower than those with a yellow base colour; 'tart' apple eaters did not make this distinction. This suggested that 'sweet' apple eaters of both ethnicities have a strong visual bias for apples which are green, expecting them to be sour.

In conclusion, this research was the first work of its type to document ethnic and apple choice differences among consumers in a metropolitan market. As such, it is anticipated that this work will assist industry in understanding and more appropriately marketing apple cultivars to their consumers.