

Factors Influencing Consumer Behavior When Purchasing and Buying Apples

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INTRODUCTION

Apples, next to oranges, are the second most popular consumed fruit crop in the United States. The popularity of apples is, however, being challenged nowadays by other types of fruit, notably bananas, soft citrus and grapes. Besides the substitutability of fruit species, there is also evidence for possible substitution in consumer purchase decisions among cultivars. For example, an increase in the price of 'Fuji' apple will result in a reduction in consumer demand for 'Fuji' and an increase in demand for 'Golden Delicious' (Patterson and Richards, 2000).

Several authors investigated the consumer preferences finding such as the cultivar differences (Dailland-Spinnler *et al.*, 1996; Jaeger *et al.*, 1998; Kókai *et al.*, 1998), consumers' age (Kühn and Thybo, 2001; Péneau *et al.*, 2006), gender (Péneau *et al.*, 2006), nationality (Racskó, 2007), fruit texture (Fillion and Kilcast, 2002) mealiness (Jaeger *et al.*, 1998) and/or price (Market Review, 1996) to be important for the preferences. Other attributes seem to have a negative impact on consumer choice such as the origin from import, GMO and one year cold stored (Kirchhoff *et al.*, 2008).

MATERIALS & METHODS

As a part of a NCR-SARE Grant, consumer taste testing was conducted on Nov. 13-15, 2009 in Cleveland during the Fabulous Food Show. Consumers (attendees) from different age groups, genders, and educational/social backgrounds were recruited for the trial. In total, 757 consumers (400 males and 345 females) participated. Age demographics were: younger than 20 = 15; between 20 and 40 = 56; between 40 and 60 = 56; older than 60 = 56. The consumer test consisted of a questionnaire on which consumers were asked to rate the importance of 12 factors influencing their purchasing behavior. Additional background questions were asked about the attendees' themselves.



RESULTS

For the participants asked the taste seemed to be significantly the most important factor that influences their apple purchasing behavior (Fig. 1). Appearance, price, growing area and sales place were also important but at lower levels. Seemingly no particular importance was given to advertisement and origin of apple. Significant differences were not found in rating scores between male and female consumers. No close correlation was found between annual household income and the importance score given to apple price (Fig. 2). Although very close relationship was not found between age and apple eating frequency, it was clear from the data that younger consumers eat apples more often than do older ones (Fig. 3).

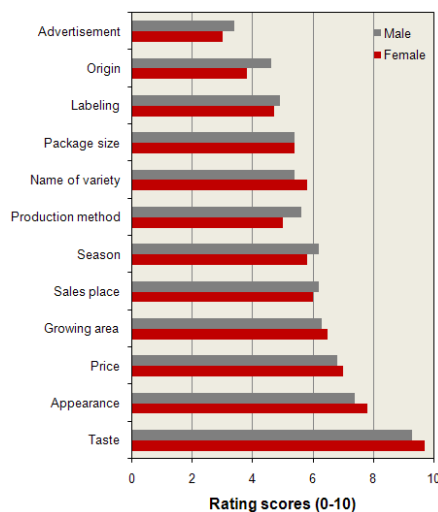


Fig. 1. Attributes influencing the purchasing behavior of consumers. Different letters above columns represent significant differences among attitudes at $P < 0.05$ level (avg. of male and female).

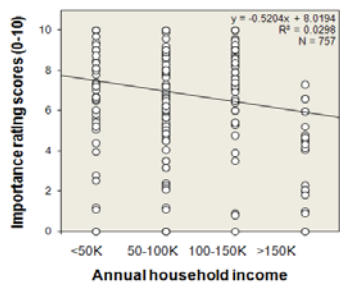


Fig. 2. Relationship between annual household income and the importance rating score given to apple price.

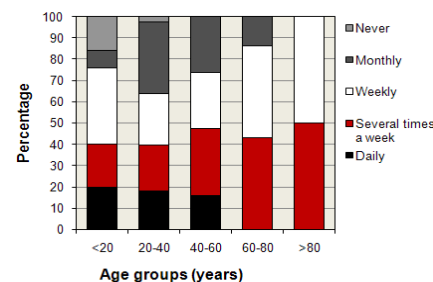


Fig. 3. Apple consuming frequency by age groups of the participants..

Participants indicated that the most common reason for purchasing/eating apples is health/diet (Fig. 4). Supporting local growers and habit/tradition reasons were only 15% of the answers. Consumers usually do not use apples as a substitution of other fruits. In the questionnaire, consumers were asked which fruits they would buy if they could not find apples at their retail outlet. Bananas were the clear choice with more than 30% percent of the answers (Fig. 5). Pears and grapes were also of great preference.

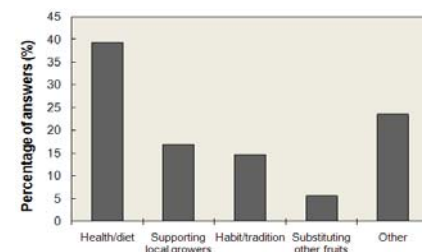


Fig. 4. Reasons for apple purchasing/eating indicated by the participants.

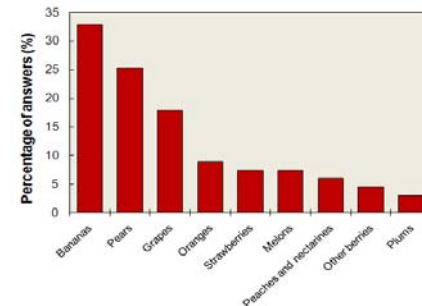


Fig. 5. Percentage of the answers to the question "If you could not find apples in the groceries or direct marketers, what other fruit would you prefer to buy instead of apples?"