

The Preference of Americans Residing in the US for Korean Traditional Cookies

Kyung Ah Lee¹, Hyun-Joo Bae^{2*}

¹Division of Foodservice and Distribution, Samsung Everland Inc.

²Department of Food and Nutrition, Daegu University

한국 전통 한과에 대한 미국인들의 선호도

이경아 · 배현주^{2*}

¹삼성에버랜드 유통사업부, ²대구대학교 식품영양학과

국문요약

본 연구는 미국에서 우리나라 전통과자인 한과의 판매 가능성과 수용여부를 파악하기 위해서 미국인 대학생을 대상으로 설문 조사와 관능검사를 실시한 결과이다. 설문 시에는 적절한 양과 가격, 섭취경험, 구입의사 등에 대해서 조사하였고, 관능검사 시에는 다식, 산자, 약과, 엿강정에 대해서 색깔-모양-냄새와 greasiness, sweetness, firmness, adhesiveness, crispiness, dryness, overall acceptance에 대해서 평가하였다. 관능검사 결과 약과는 greasiness 가 유의적으로 높았고($p < 0.01$), 산자와 엿강정은 crispiness 가 유의적으로 높게 조사되었다($p < 0.01$). 전체적인 수용도는 다식이 유의적으로 낮게 조사되었다($p < 0.01$). 조사대상자는 한과를 스낵(42.9%)으로 이용하겠다고 가장 많이 응답했다. 그러나 구입의사에 대한 항목에서는 시식 후 90.5%가 구입의사가 없다고 응답했으므로 한과의 세계화를 위해서는 각 나라의 식문화를 고려하여 각 나라 사람들에게 친숙한 향과 맛을 첨가하여 제품을 생산할 필요가 있다고 사료된다.

Key Words : 한과, 다식, 산자, 약과, 엿강정, 관능평가

I. INTRODUCTION

Over the past several years, Korean traditional food companies have had a growing interest in the development of products for consumers beyond their domestic and into international markets. To succeed in the global marketplace, food companies need to develop products that will meet consumer expectations across various cultural settings.

Han-Kwa is a Korean traditional cookie made from rice powder. Koreans prepare them for festive occasions such as birthdays and weddings as well as for ancestral memorial services. They also make them available for seasonal occasions such as the Lunar New Year's Day(*Seollal*) and Korean Thanksgiving Day(*Chuseok*). *Han-Kwa* is appreciated for its artistic and decorative colors, patterns and its pleasingly sweet taste. Beautifully packaged baskets or boxes of *Han-Kwa* also make excellent gifts, especially appropriate for the elderly. These are ten or more kinds of *Han-Kwa* product groups branching into one or more hundred kinds. The following four kinds of Korean traditional cookies are highly popular in Korea(Lee & Maeng, 1987).

Dasik is made of various powders such as pine tree pollen,

black sesame, mung bean starch dyed with the pine fruit of a wild plant and dried chestnuts, all with different colors and flavors. These ingredients are mixed with honey and the dough is pressed into shapes with a *dasik-pan* or traditional cookie mold. *Sanja* is a sweet fried rice cookie covered with nut or grain powder. *Sanja* pieces are made from kneading glutinous rice flour and shaping them, allowing them to air-dry, prior to deep-frying them in boiling oil. After spreading on starch syrup or honey, the fried cookies, resembling cocoons, are rolled in the powder of assorted materials prepared separately, including pine nut, sesame, green bean or glutinous rice chips. Natural seasonings such as ginger provide good taste and an aroma that is unique. *Yackwa* is one of Korea's best-known cookies, dating back to the Goryeo Dynasty(918-1392). It is made of flour, honey, and sesame oil. *Yutganjung* is made from roasted sesame seeds which are then mixed with taffy, rolled out into 7 mm-thick sheets and cut into bite-sized pieces.

There are a number of research studies that have attempted to understand the similarities and differences in consumer food perceptions and preferences across the cultures. For instance, Rozin(1996) argues that culture provides the

* Corresponding author : Hyun-Joo Bae, Department of Food and Nutrition, Daegu University, #15, Naeriri, Jillyang, Gyeongsan, Gyeongbuk, 712-714 Korea
Tel: 82-53-850-6835, Fax: 82-53-850-6839, E-mail: bhj@daegu.ac.kr

strongest determinant of food choice. Prescott et al.(2002) found that price is the most important feature for Japanese consumers, whereas sensory appeal leads New Zealand consumers to decide on their foods.

According to the Prescott et al.(1998) study, tailoring the sensory qualities of foods for consumers in international markets, whose diets may well be very different from one's own, has three aspects. First, appropriate types of foods must be chosen for export. Apart from the obvious problems associated with religious/cultural restrictions, e.g. halal restrictions on meats in Muslim countries, the export of familiar food types may produce neophobic responses in consumers(Pliner & Pelchat, 1991), which will mitigate against consumption. Second, there is a need to determine, where appropriate, which flavors are acceptable for a particular product type. Third, it is essential to ensure that the level and balance of sensory qualities such as tastes are acceptable.

Furthermore, among the factors facilitating the acceptance of unfamiliar foods, information has been found to be influential. Cardello et al.(1985) demonstrated that when information on their preferred use context is given, hedonic responses to novel foods are enhanced. In a study by Tuorila et al.(1994), label information and more thorough descriptive information are superior and almost equally efficient for improving hedonic ratings and the likelihood of consumption, as compared to a baseline(no information) condition. Pelchat & Pliner(1995) explain that positive taste information and "taste like food ○○" information are superior, compared to information on nutritional benefits or no information.

Food choice is, however, a complex function of preferences for sensory(taste, aroma, texture, etc.) characteristics, combined with the influence of non-sensory factors, including ethical concerns(Sparks et al. 1995), food-related expectations and attitudes(Shepherd 1989; Rozin 1996), health claims(Vickers 1993; Betts et al. 1995; Furst et al. 1996), market environment providing accessibility to market and food availability(Day et al. 1978; Axelson 1986; Takeda 1990; Son 1994), mood(Rogers 1996), nutritional information(McFarlane & Pliner 1997) and price(Vickers 1993; Solheim & Lawless 1996).

Investigating relationships between factors influencing food choice and the relative impact they have on consumer purchase decisions is important to the success of product innovations and reformulations(Solheim & Lawless 1996).

The current interest in multiculturalism and awareness of the importance of diet in health has brought increasing attention to Asian foods, including Korean food. Joo et

al.(2001) found that most Americans residing in Korea have become experienced in eating Korean food and 66.3% of them have experienced eating Korean food in other countries. Additionally, Americans show considerable interest in Korean food because of the favorable appearance and color of Korean food. Sim et al.(2000) reveal that Korean Americans like Korean food because it usually contains a variety of critical nutrients and little fat. Besides those desirable things, consumer's perceptions of the quality of foreign foods tend to be product-specific(Gaedeke 1973), i.e. consumers do not perceive all products from the same country to have equal quality. However, little is known about the preferences and perceptions of Americans residing in the U.S. for Korean food, especially Korean traditional cookies(*Han-Kwa*).

Therefore, the purpose of this study was to examine the extent to which the Americans residing in the U.S. perceived a desire for one of the unfamiliar Korean foods, namely Korean traditional cookies(*Han-Kwa*) through sensory evaluation. In addition, based on the results of our study, the ultimate purpose of this study was to assess the potential of introducing Korean traditional cookies(*Han-Kwa*) into the US market. This study can be beneficial for Korean traditional cookie companies who may wish to enter into the U.S. market and introduce some part of the Korean dietary culture to the international population.

II. MATERIAL AND METHOD

1. Sensory panel

Members of the sensory panel were twenty-one undergraduate students at Oklahoma State University. Candidates were carefully screened for their taste acuity, ability to recognize and describe common flavors and textures and their ability to evaluate the intensity of their perceptions using a 6-point Likert scale.

The respondent group consisted of 12 females(57.1%) and 9 males(42.9%). The ages of the respondents are categorized as follows: 20 respondents were between 18 and 25(95.2%) and 1 was between 26 and 35(4.8%). Further, in terms of the racial composition of the respondents, 20(95.2%) were White American, and 1(4.8%) was Black or African-American.

2. Samples

Four kinds of Korean traditional cookies(*Han-Kwa*), including *Dasik*, *Sanja*, *Yackwa* and *Yutganjung* were used as samples. Korean traditional cookies(*Han-Kwa*) were purchased by Shinkung Traditional Food Co.(Gyeonggi,

Korea). The specific weight per one piece was 6 g for *Dasik*, 4 g for *Sanja*, 10 g for *Yackwa*, and 6 g for *Yutgangjung*. The samples were coded using 3-digit random numbers and served on white paper plates covered with transparent plastic wrap at room temperature.

3. Sensory evaluation

A sensory evaluation was carried out on March 5, 2003, during the afternoon, between 1:00 and 3:00 pm. All judgments were made by the respondents while in individual, separated booths maintained at 21°C, under low, orange illumination to minimize the effects of cookie colors.

All panelists first read the general instructions and participated in a training session. They then received a separate set of samples for testing each cookie's sensory attributes accompanied by a written sensory evaluation form. Samples were not swallowed and purified water was offered for oral rinsing and a cuspidor for expectoration.

A sensory evaluation form was pre-tested before developing the final version. In a pretest, we examined whether the respondents could clearly understand the intended contents of the study, whether the respondents precisely understood the terminology used in the questionnaire and whether there were any missing question items.

The questionnaire used for this study consists of three sections. The first section was designed to record a sensory evaluation of Korean traditional cookies (*Han-Kwa*) including flavor related questions (e.g., greasiness, sweetness etc.), appearance related questions (e.g., color, shape etc.) and questions about appropriate portion size and price level. The subjects were asked to taste and look at each cookie in turn and rate it using a 6-point Likert scale (1 = not noticeable and 6 = very strong or 1 = dislike very much and 6 = like very much).

The second section was designed to record the general perceptions of the participants for Korean traditional cookies (e.g., familiarity, usage etc.). Subjects were also asked to respond to an open-ended question on why they do not like Korean traditional cookies (*Han-Kwa*). The third section was designed to profile the participants' demographic data.

4. Data Analysis

The data collected on each returned questionnaire were analyzed using the Statistical Package for the Social Sciences (SPSS) 11 for Windows (SPSS Inc., 2002).

For each attribute, the data were subjected to an analysis of

variance (ANOVA) to determine whether the means among the four kinds of Korean traditional cookies significantly differ. Possible significant differences between individual means were evaluated by Tukey's multiple comparisons test. All reported differences between means were significant at least at the 5% level.

The mean ratings, across the samples, were also used to examine correlations among the descriptive sensory attributes and for predicting the overall acceptance from other attributes with stepwise multiple regression analysis. Significant ($p < 0.05$) effects are reported below.

III. RESULTS AND DISCUSSION

1. Sensory profiles of Korean traditional cookies

Lee et al. (1987) demonstrated that the main sensory characteristics of *Dasik* were firmness, adhesiveness and sweetness. Crispiness is important in *Sanja*, greasiness, sweetness, firmness and adhesiveness in *Yackwa* and crispiness, firmness and sweetness in *Yutgangjung*.

Yackwa scored highest for greasiness which differed significantly among all other cookies at $p < 0.01$. *Yutgangjung* rated significantly higher for sweetness than *Dasik* ($p < 0.05$). The scores for crispiness were significantly high in *Sanja* and *Yutgangjung* ($p < 0.01$). The score for dryness was significantly lowest in *Yackwa* ($p < 0.05$). Firmness was most pronounced in *Yutgangjung* ($p < 0.01$). In terms of adhesiveness, color, shape and aroma, there was no significant difference among the four kinds of cookies.

The panelists found *Dasik* to be less acceptable than the others (Table 1). Mean overall acceptance ratings for *Sanja*,

<Table 1> Means of Korean traditional cookies for the descriptive sensory attributes

	<i>Dasik</i>	<i>Sanja</i>	<i>Yackwa</i>	<i>Yutgangjung</i>
Greasiness ¹⁾	1.67(0.97) ^{b3)}	1.95(1.66) ^b	3.48(1.78) ^a	2.10(1.41) ^b
Sweetness ²⁾	1.71(1.01) ^b	2.19(0.87) ^{ab}	2.38(1.07) ^{ab}	2.76(1.18) ^a
Adhesiveness	3.62(1.83) ^a	3.19(1.36) ^a	3.76(0.94) ^a	4.19(1.54) ^a
Crispiness ¹⁾	1.86(1.20) ^c	3.67(1.83) ^b	2.76(1.37) ^c	5.14(1.24) ^a
Dryness ²⁾	3.71(1.59) ^{ab}	4.19(1.33) ^a	2.95(1.53) ^b	4.33(1.28) ^a
Firmness ¹⁾	4.05(1.69) ^b	3.00(1.48) ^c	3.95(1.16) ^b	5.29(1.10) ^a
Color	3.71(1.49) ^a	4.00(1.10) ^a	3.52(1.40) ^a	3.38(0.92) ^a
Shape	4.33(1.15) ^a	4.29(1.19) ^a	3.86(1.06) ^a	4.43(0.93) ^a
Aroma	2.95(1.32) ^a	2.95(1.24) ^a	3.14(1.20) ^a	3.62(1.28) ^a
Overall Acceptance ¹⁾	1.71(1.06) ^b	2.81(1.21) ^a	3.14(1.42) ^a	3.10(1.30) ^a

1) $p < 0.01$ 2) $p < 0.05$.

3) a,b,c: Means with the same superscripts in each row are not significantly different.

Yackwa and *Yutgangjung* ranged from 2.81 to 3.14, whereas the rating for *Dasik* was 1.71(see Table 1), which might be due to having the lowest scores in crispiness and sweetness. It is well known that consumers are very sensitive to even small variations in sweetness(Moskowitz et al. 1974; Drewnowski, 1987). Drewnowski et al.(1998) emphasized the importance of sweetness as the key sensory attribute that determines preferences for cookies. Drewnowski et al.(1998) found that overall acceptability for cookie texture and flavor declined sharply with a 25% reduction in recipe sugar levels. Thus, as long as the sweetness of *Han-Kwa* is maintained, consumers in the international market will accept these unfamiliar Korean traditional cookies.

The effects of descriptive sensory attributes on the overall acceptance for *Sanja* are given in <Table 2>. Crispiness and aroma more effectively work to predict the overall acceptance for *Sanja* than other attributes. Furthermore, there was a negative correlation between crispiness and overall acceptance for *Sanja*. However, Lee et al.'s research which utilized native Koreans(1987) determined that crispiness is the most important quality characteristics of *Sanja*.

Additionally, there was no significant correlation between descriptive sensory attributes and other Korean traditional cookies, such as *Dasik*, *Yackwa* and *Yutgangjung*.

2. General perception of participants for the Korean traditional cookies

As shown in <Table 3>, panelists answered that one piece was an appropriate portion size for *Dasik*. This gave *Dasik* the lowest score for overall acceptance. For other Korean traditional cookies, two pieces were deemed appropriate as a portion size. Moreover, the results of the pre-test suggested that two pieces of each cookie were appropriate for one portion size. The panelists perceived that less than 25 cents

<Table 2> The effects of descriptive sensory attributes on overall acceptance for *Sanja*

	B-value	Beta	T-value	Sig. T
Greasiness	.302	.415	1.945	.078
Sweetness	.365	.263	1.555	.148
Adhesiveness	-.190	-.214	-1.132	.282
Crispiness	-.504	-.761	-2.322	.040
Dryness	.152	.167	.531	.606
Firmness	.281	.344	1.348	.205
Color	-.008	-.007	-.027	.979
Shape	.337	.332	1.201	.255
Aroma	.579	.596	2.427	.034
Constant	-.729		-.529	.607

df = 9, R² = .716, F-ratio = 3.076, P-value = .041

was reasonable for two pieces of *Dasik*. It also indicated that *Dasik* was less favored by our panelists than the other cookies. The reasonable prices for other Korean traditional cookies were between 25 cents and 49 cents.

The results from the sensory panel, shown in <Table 4>, indicated that 20(95.2%) have never tried Korean traditional cookies and 19(90.5%) have never heard of them before. This, we believe, is due to geographical restriction. The State of Oklahoma's 2000 year racial composition includes 76.2% White American, 7.6% Black and African American, 7.9% American Indian, 5.2% Spanish or Latin, 1.4% Asian, 0.1% Native Hawaiian, 2.4% some other races and 4.5% two or more races(Oklahoma Department of Commerce, 2002). Therefore, the international population, international grocery markets and international restaurants are few in number in the State of Oklahoma. Of our panel, 42.9% considered Korean traditional cookies as a snack. Nineteen(90.5%) had no intention to purchase Korean traditional cookies. According to Pliner et

<Table 3> Appropriate portion size and price for four Korean traditional cookies

	N(%)			
	<i>Dasik</i>	<i>Sanja</i>	<i>Yackwa</i>	<i>Yutgangjung</i>
Appropriate Portion Size				
1 ea	9(42.9)	5(23.8)	6(28.6)	8(38.1)
2 ea	5(23.8)	9(42.9)	9(42.9)	8(38.1)
3 ea	3(14.3)	5(23.8)	2(9.5)	4(19.0)
4 ea	3(14.3)	1(4.8)	4(19.0)	1(4.8)
5 ea	1(4.8)	1(4.8)	-	-
Reasonable Price*				
< USD .25	10(47.6)	6(28.6)	4(19.0)	6(28.6)
USD .25 - USD .49	7(33.3)	10(47.6)	12(57.1)	11(52.4)
USD .50 - USD .74	2(9.5)	3(14.3)	1(4.8)	2(9.5)
USD .75 - USD .99	2(9.5)	2(9.5)	4(19.0)	2(9.5)

* Prices correspond to two pieces of each Korean traditional cookie.

<Table 4> The general perception of participants for Korean traditional cookies

	N(%)
Have you ever tried Korean traditional cookies before?	
Yes	1(4.8)
No	20(95.2)
Have you ever heard of Korean traditional cookies before?	
Yes	2(9.5)
No	19(90.5)
What do you think Korean traditional cookies are appropriate for?	
Dessert	2(9.5)
Lunch	0(0.0)
Snack	9(42.9)
Gift	4(19.0)
No Response	6(28.6)
If available, would you like to buy Korean traditional cookies?	
Yes	2(9.5)
No	19(90.5)

al.(1993), exposure to unfamiliar foods enhances a person's willingness to try them. Tuorila et al.(1998) also revealed that actual enjoyment of an unfamiliar food is best predicted by expected enjoyment based on either verbal information or upon seeing the product. Kristensen et al.(1998) demonstrated that the determinants for marketing success of new food products are grouped into marketing activities designed to promote new products, company competencies, management support, usage of customer information and calculations of the likelihood of success before introducing products to the market. Interestingly, our panel respondents were seldom exposed to Korean traditional cookies, due to the White American-oriented population composition, which is essentially free of Korean restaurants and Korean grocery markets. Thus, findings from the study suggested that Korean traditional cookie companies should devise a variety of sales and marketing tools in order to widely promote Korean traditional cookies in the global market.

Several attributes negatively affected the panelists' perceptions of Korean traditional cookies. First, they had a negative impression from the unfamiliar aroma. Second, the taste was also presented as unfavorable. Detailed comments were made, such as "bitter, greasy, not sweet enough, sour, tasteless and waxy". Third, the texture was also mentioned: they perceived that the Korean traditional cookies were too adhesive and hard.

IV. SUMMARY AND CONCLUSION

It has been thought that there were few sensory attributes significantly representing Korean traditional cookies. In particular, the results of this study have shown the following:

1. *Yackwa* scored highest for greasiness differing significantly from all other cookies at $p < 0.01$. *Yutgangjung* rated significantly higher for sweetness than *Dasik* ($p < 0.05$). The scores for crispiness were significantly high in *Sanja* and *Yutgangjung* ($p < 0.01$). Dryness was significantly lowest in *Yackwa* ($p < 0.05$). Firmness was most pronounced in *Yutgangjung* ($p < 0.01$).
2. The panelists found *Dasik* to be less acceptable than the others.
3. Assessment of crispiness and aroma indicates they effectively work to predict the overall acceptance for *Sanja* than other attributes. Further, there was a negative correlation between crispiness and the overall acceptance for *Sanja*.
4. Panelists agreed that two pieces were an appropriate portion size for Korean traditional cookies except *Dasik*. They

also perceived that reasonable prices for two pieces of Korean traditional cookies were between 25 cents and 49 cents, but *Dasik*.

5. Twenty panelists (95.2%) had never tried Korean traditional cookies and 19 (90.5%) had never heard of them before. Some, 42.9%, considered Korean traditional cookies as a snack. Nineteen (90.5%) had no intention of purchasing Korean traditional cookies.

6. The negative perceptions of the panelists for Korean traditional cookies were due to the unfamiliar aroma, taste and texture.

In order to launch Korean traditional cookies (*Han-Kwa*) into the U.S. market, this study suggested the following several implications:

1. Sensory appeal influences purchase probability of unfamiliar foods in foreign countries. As we noted previously, sweetness is the salient attribute that determines preferences for cookies and the scores for sweetness are low for these Korean traditional cookies. Korean traditional cookie manufacturers should underscore the need for developing a suitable recipe for international consumers' preferences.
2. Purchase probability increases when price evaluations are based on current price levels of familiar reference products.
3. Future studies are needed to develop methods for determining the acceptability of relatively novel foods to be developed specifically for export markets. Studies also need to address the complexity of food preferences from the point of view of both sensory and non-sensory influences including: culture, ethical concerns, food-related expectations and attitudes, health claims, price, mood, nutritional information, package and the market environment providing accessibility to market and food availability.
4. Researchers should expand their observations to actual future-test choices among unfamiliar foods to see to what extent participants actually try unfamiliar foods after the first exposure in a sensory evaluation.
5. The expected acceptance was mainly predicted by the degree of enjoyment and frequent use of the specific familiar reference products. The acceptance of an unfamiliar food is largely determined by how it relates to familiar foods that are part of an individual's current diet.
6. Korean traditional cookie companies should be aware of the importance of promoting Korean traditional cookies to the global market with a variety of marketing activities including the employment of specific familiar reference products.

■ REFERENCES

- Axelsson ML. 1986. The impact of culture on food-related behavior. *Annual Reviews Nutrition*, 6: 345-363.
- Betts NM, Amos RJ, Georgiou C. 1995. What young adults say about factors affecting their food intake. *Ecological Food and Nutrition*, 34: 59-64.
- Cardello AV, Maller O, Masor HB, Dubose C, Edelman B. 1985. Role of consumer expectancies in the acceptance of novel foods. *Journal of Food Science*, 50, 1707-1718.
- Day M, Lentner M, Jaquez S. 1978. Food acceptance patterns of Spanish-speaking New Mexicans. *Journal of Nutrition Education*, 10: 121-123.
- Drewnowski A. 1987. Sweetness and obesity. In J. Dobbing(Ed.), *II-SI-Nutrition Foundation Symposium*. Berlin: Springer-Verlag.
- Drewnowski A, Nordensten K, Dwyer J. 1998. Replacing sugar and fat in cookies: Impact on product quality and preference. *Food Quality and Preferences*, 9(1/2): 13-20.
- Furst T, Connors M, Bisogni CA, Sobal J, Falk LW. 1996. Food choice: A conceptual model of the process. *Appetite*, 26(3): 247-265.
- Gaedeke R. 1973. Consumer attitudes toward products 'made in' developing countries. *Journal of Retailing*, 49: 12-24.
- Joo NM, Kennon LR, Sim YJ, Lee KA, Jeong HS, Park SJ, Chun HJ. 2001. The perception and preference of Americans residing in Korea for Korean traditional food. *Journal of the Korean Home Economics Association*, 39(6): 15-23.
- Kristensen K, Ostergaard P, Juhl HJ. 1998. Success and failure of product development in the Danish food sector. *Food Quality and Preference*, 9(5): 333-342.
- Lee CH, Maeng YS. 1987. A literature review on traditional Korean cookies, Hankwa. *Korean Journal of Dietary Culture*, 2(1): 55-69.
- Lee CH, Maeng YS, Ahn HS. 1987. Studies on the sensory characteristics of traditional Korean cookies, Hankwa. *Korean Journal of Dietary Culture*, 2(1): 71-79.
- McFarlane T, Pliner P. 1997. Increasing willingness to taste novel foods: Effects of nutrition and taste information. *Appetite*, 28: 227-238.
- Moskowitz HR, Kluter RA, Westerling J, Jacobs HL. 1974. Sugar sweetness and pleasantness: Evidence for different psychophysical laws. *Science*, 184: 583-585.
- Oklahoma Department of Commerce. 2002. *Demographic state of the State: A report to the governor and legislature on census 2000 demographics of the house and senate seats of the second regular session of the 48th legislature of the State of Oklahoma*. Oklahoma Department of Commerce [On-line]. Available: <http://www.odoc.state.ok.us/osdc.htm>.
- Pelchat ML, Pliner P. 1995. "Try it. You'll like it." Effects of information on willingness to try novel foods. *Appetite*, 24: 153-165.
- Pliner P, Pelchat ML. 1991. Neophobia in humans and the special status of foods of animal origin. *Appetite*, 16: 205-218.
- Pliner P, Pelchat M, Grabski M. 1993. Reduction of neophobia in humans by exposure to novel foods. *Appetite*, 20: 111-123.
- Prescott J, Bell GA, Gillmore R, Yoshida M, O'Sullivan M, Korac S. 1998. Cross-cultural comparisons of Japanese and Australian responses to manipulations of sourness, saltiness and bitterness in foods. *Food Quality and Preference*, 9(1/2): 53-66.
- Prescott J, Young O, O'Neill L, Yau N J, Stevens R. 2002. Motives for food choice: A comparison of consumers from Japan, Taiwan, Malaysia and New Zealand. *Food Quality and Preference*, 13: 489-495.
- Rogers PJ. 1996. Food choice, mood and mental performance: Some examples and some mechanism. In H. Meiselman, & H. J. H. MacFie(Eds.), *Food choice, acceptance, and consumption*(pp. 319-345). London: Blackie.
- Rozin P. 1996. The socio-cultural context of eating and food choice. In H. Meiselman, & H. J. H. MacFie(Eds.), *Food choice, acceptance, and consumption*(pp. 83-104). London: Blackie.
- Shepherd R. 1989. Factors influencing food preferences and choice. In R. Shepherd(Ed.), *Handbook of the psychophysiology of human eating*(pp. 3-24). Chichester: Wiley.
- Sim YJ, Jung BM, Kim ES, Joo NM. 2000. A survey for the international spread of Korean food from the Korean residents in the U.S. *Korean Journal of Society Food Science*, 16(3): 210-215.
- Solheim R, Lawless HT. 1996. Consumer purchase probability affected by attitude towards low-fat foods, liking private body consciousness and information on fat and price. *Food Quality and Preference*, 7(2): 137-143.
- Son JY. 1994. *Factors influencing diet and dietary changes of Koreans in Tompkins Country*. Unpublished doctoral dissertation, Cornell University, Ithaca, NY.
- Sparks P, Shepherd R, Frewer L J. 1995. Assessing and structuring attitudes toward the use of gene technology in food production: The role of perceived ethical obligation. *Basic and Applied Social Psychology*, 16: 267-285.
- Takeda T. 1990. *Acculturation in the food habits of Japanese sojourners in the USA*. Unpublished master's thesis, Cornell University, Ithaca, NY.
- Tuorila HM, Meiselman HL, Bell R, Cardello AV, Johnson W. 1994. Role of sensory and cognitive information in the enhancement of certainty and liking for novel and familiar foods. *Appetite*, 23: 231-246.
- Tuorila HM, Meiselman HL, Cardello AV, Leshner LL. 1998. Effect of expectations and the definition of product category on the acceptance of unfamiliar foods. *Food Quality and Preference*, 9(6): 421-430.
- Vickers ZM. 1993. Incorporating tasting into a conjoint analysis of taste, health claim, price and brand for purchasing strawberry yogurt. *Journal of Sensory Studies*, 8: 341-352.