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Part Three
Consumer Perceptions

International Commodity Marketing: South Korean Perceptions of Canadian, U.S., and Australian Beef

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Introduction

Since the late 1980s, South Korea has become one of the most affluent and influential Asian countries. Economic growth has considerably increased per capita disposable income, favoring the consumption of more meats. Beef consumption has continuously grown since the reopening of the market to beef imports in 1988. Per capita beef consumption grew from 3.6 kg in 1986 to 6.1 kg in 1994 (Bryne et al. 1995). South Korean self sufficiency in beef supplies was 54.5 percent in 1994 (South Korean Ministry of Agriculture, Fishery and Forestry, 1995). Multilateral trade pressures favouring freer beef trade have given greater international access to the South Korean beef market. This will increase even more in the future. Information from the South Korean Ministry of Foreign Affairs indicates that beef import quotas will increase from 106,000 tonnes in 1994 to 225,000 tonnes by 2000. Quotas will be abolished after the year 2000.

Potential exists for the Canadian beef industry to penetrate the South Korean market for grain-fed beef. However, to date, the Canadian beef industry has been a minor participant in this market. Canadian beef exports to Korea were almost nonexistent in 1991 and by 1994, they were only 1.3 percent of the total beef exports into Korea. South Korea has been targeted as a primary export market by the Canadian Beef Export Federation, an organization charged with developing international beef markets for Canadian product.

Canada produces a grain-fed beef product that, in terms of price and quality, appears to be competitive in certain market segments in South Korea, such as in the hotel and restaurant trade. To evaluate the competitiveness of Canadian beef in the high-end segment of this market, specifically the four- and five-star hotel restaurant sector, a market research survey was undertaken in November 1995 to evaluate South Korean perceptions of Canadian beef relative to beef sourced from the major national export competitors. Information on buyers' perceptions is important for evaluating marketing program effectiveness, assessing competitor strengths and weaknesses and planning future marketing strategies. Information on total sales and market shares are also valuable data sources used to evaluate the success of marketing efforts and competitiveness, but direct information on how a product is viewed by purchasers provides direct insight into the reasons underlying these market outcomes. This information gives guidance for future marketing strategies.

Two types of quantitative survey questions (semantic differential scale questions and stated preference questions) were asked of more than 40 hotel purchasing managers and hotel executive chefs in South Korea in the fall of 1995 by means of direct interview. Hotel buyers and executive chefs are the primary decisions makers in hotel meat purchase decisions. One individual, fluent in Korean and English, conducted the interviews.

The survey had four major purposes:

I. To determine which beef product attributes are the most important to the targeted users and, in particular, to evaluate the importance of country of origin (country brand) in buying decisions.

II. To gather information that may be used in developing marketing strategies to increase Canada's market share of grain-fed beef exports to Korea.

III. To provide a baseline measurement of Korean perceptions of Canadian, U.S., and Australian beef and thus be able to measure the effectiveness of any marketing campaign in the target market in the future.

IV. To evaluate two different quantitative survey methodologies, specifically semantic differential scale and stated preference.

In the remainder of this paper, further background on the South Korean beef market is provided. Stated preference and semantic differential scale survey methodologies are then outlined in addition to the development of the survey instruments. The survey results are presented and evaluated. The concluding section of the paper gives suggestions for further market research, an evaluation of the survey methodologies employed, and suggestions for marketing strategies in the South Korean market.

Background

A complex bureaucratic structure regulates the import of beef into South Korea. Interested readers can refer to CBEF (1994) or Kim et al. (1996) for details on the practices and institutions that are applied to imported beef. One important recent change is that tourist hotels can now deal directly with foreign beef suppliers through a Simultaneous Buy and Sell system. Product quality and service are increasingly viewed as important product attributes in addition to price and the four- and five-star hotel segment was identified as a primary target market for Canadian beef.

The luxury hotel segment demands high quality beef and such beef is usually grain-fed. The United States, a grain-fed beef producer, has been a primary supplier into this market (The Korean Tourist Hotel Supply Center) and in 1994 was the source of 70 percent of the Simultaneous Buy and Sell imports into this market. Australia accounted for 22 percent of this market segment while Canada supplied less than 1 percent. Historically, Australia has been a supplier of low-cost, grass-fed beef, but grain-fed beef is now beginning to be supplied for higher-priced markets, such as the Korean hotel and restaurant industry.

Hotel purchasing managers and executive chefs, the primary decision-makers for hotel beef purchases, are concerned with price and the reliability of supply (Kim 1996). Executive chefs are primarily concerned with product preparation, quality, and customer satisfaction, which is why this group was designated as the target group for the survey instruments. By direct interviews in Korea, they were asked a series of questions designed to determine their perceptions and relative preferences for Canadian, United States, and Australian beef. The question types and the survey methodologies are described in the next section.

Research Methodology

The underlying research models are built upon the premise that buyers' perceptions of a selected product and its characteristics strongly influence the purchase decision. The buyer's perceptions will determine whether or not a purchase is made, whether a different product is purchased from a competing supplier, or whether no purchase is made. Two methodologies were employed to evaluate South Korean perceptions on imported beef. The first method applied the semantic differential scale used by Nagashima (1970) and Papadopoulos et al.(1994) while the second method used a stated preference research methodology to evaluate buyers' preferences. The research methods are outlined below.

Semantic Differential Scale

A seven-level semantic differential scale with bipolar adjectives was utilized. The semantic differential scale technique enables the researcher to probe both the direction and intensity of respondents' attitudes towards such concepts as product image, advertising image, service image, or country image (Green, Tull and Albaum, 1988). Scales for product attribute image, service/promotion image, and general country image were developed based on initial background research. A sample question is given in Figure 1 asking each respondent to rate the beef product from Canada, Australia, and the U.S. on tenderness. The bipolar adjectives

are -3, being tough, and +3, being tender. Each semantic differential scale question had a similar structure, but, to prevent sequence bias and response routinization, the scale was randomly rotated (Papadopoulos et al., 1994). The individual ratings were summed to develop product profiles by country of product source, service/promotion profiles by country source, and general country image profiles providing a rating of beef from each country in the study. Simple analysis of variance was used to determine if there was any response difference by country.

Initial background research based on industry reports (CBEF 1994; U.S. Meat Export Federation, 1994), meetings with industry representatives, meetings with government experts, and published market research findings identified twelve beef product attributes, four service/promotion attributes, and five country image attributes. These attributes are listed in the first columns of Tables 1, 2, and 3.

The benefits of the semantic differential scale include the provision of a rich data set on many different attributes; the analysis of these data can be very simple and the results from this analysis are straightforward to interpret. The drawbacks of this methodology are that the respondents require a working knowledge of each product or brand of product (i.e. country source in this study). Since Canada has a very small market presence in Korea we expected that numbers of respondents might not be able to answer specific questions on Canadian beef product attributes. Thus we expected this approach to provide information on major market competitors but we also wished to obtain knowledge of perceptions regarding Canadian product. A second quantitative methodology, a stated preference survey instrument that used fewer attributes, was developed to evaluate buyers' perceptions of beef products by country and by specific attribute level.

Stated Preference Methodology

The second quantitative method of analysis used was the stated preference method (SPM) which is based upon a buyer's hypothetical beef choice behaviour. The related methodology based on revealed preference as shown by actual choices

was not applicable in this market research setting since Canadian products had not been chosen for a number of reasons, including the lack of market development efforts. The SPM, also referred to as experimental or stated choice analysis, involves asking respondents to simulate choice behaviour with questions put in a behavioural choice context: "If you were to have these alternatives available to you, which one would you choose?"

A possible disadvantage of this technique is that peoples' stated preferences may not fully reflect actual behaviour. Another issue is whether a respondent can adequately evaluate the hypothetical choices and alternative options although the inclusion of the default option of "no choice" should allow this to be assessed. Despite these potential concerns, the stated preference model has been used extensively in empirical work, particularly in examining choices of travel, environmental amenities, and recreational facilities (Ben-Akiva and Lerman, 1987; Wilman and Pauls, 1987; Kroes and Sheldon, 1988; Hensher, Barnard and Truong, 1988; Mcleod, Boxall and Adamowicz, 1993; Adamowicz et al., 1994a, 1994b; Louviere, 1994). The method is flexible, capable of dealing with a wide variety of variables, and cheap to apply. Louviere (1994), suggests that the SPM has good predictive ability of future choices.

Analytical Framework

The SPM is based on economic principles where choices are modeled in a random utility framework; by defining the relevant attributes and levels, a utility function can be specified. Following Ben-Akiva and Lerman (1987), Kolstad and Braden (1991), Louviere (1994), and Adamowicz et al. (1994a), a general random utility function, in terms of product attributes, is expressed as: $U_{in}=V(X_{un})+\varepsilon(X_{in})$

where U_{in} is person n's utility of choosing alternative product i, V is the indirect utility function associated with the alternative, X_{in} is a vector of attribute values for alternative i as viewed by respondent n, and ε is a random element associated with errors in perceptions or measurements of utility. Total utility, U_{in} is thus a sum of

observable and unobservable components which can also be expressed as V_{in} and ε_{in} respectively. From this perspective, the choice probability of alternative i is equal to the probabilty that the utility of alternative i, U_{in}, is greater than or equal to the utilities of all other alternatives in the choice set. This can be written as follows:

$$\pi_n(i) = \Pr(V_{in} + \varepsilon_{in} \geq V_{jn} + \varepsilon_{jn}; \text{ for all } j \in C_n)$$

where C_n is the choice set for respondent *n*. Assuming that all the disturbances, ε_{in}, are independently, identically, and Gumbel-distributed with a scale parameter $\mu=1$, then the probability of choosing an alternative *i* is expressed as:

$$\pi_n(i) = \frac{\exp(V_{in})}{\sum_j \exp(V_{jn})}$$

Assuming that V_{in} is linear-in-parameters, the functional form can be expressed as: $V_{in} = \beta_1 + \beta_2 x_{in2} + \ldots + \beta_k x_{ink}$

where,

V_{in} = respondent *n*'s utility of choosing product alternative *i*,

x_{ink} = k^{th} attribute values for alternative *i* as viewed by respondent *n*,

and

β_1, β_2 to β_k are coefficients to be estimated

The model estimated and reported in this paper is a simple non-nested multinomial logit model. The empirical application requires the identification of the specific attributes (i.e. x_i) and the levels of each attribute. These are discussed next.

Empirical Model

For this study of hypothetical purchase decisions made by members of the Korean hotel and restaurant industry, a broad set of important product attributes which affect a buyer's product perceptions and purchase decisions are identified. In the literature on experimental design, such decision attributes are viewed as "factors," and the values that each factor takes on in the experiment are treated as "levels." Factors identified for beef in this study include the country of origin of the beef, the price, the product quality or grade, and the product specification. Each factor examined has four levels and these are presented in Table 4. For example, the four levels on country of origin for beef product are the United States, Korea, Australia, and Canada. The product specification evaluates the importance of fresh/chilled product versus frozen product and whether the hotels strongly desired cuts customized to their particular hotel. The target market in this survey is currently a frozen cuts market.

It is assumed that the factor descriptions affect a buyer's perceptions of beef and ultimately translate into a decision to purchase or not to purchase. The factors and the levels presented in Table 1 were used to design a fractional factorial experiment with orthogonal main effects. This required a total of 32 questions. The questions were blocked into four sets of questions with one block incorporated into each questionnaire and each question giving three alternatives with different beef product profiles. Figure 2 is an example of one question in the survey. Choices A and B are two different beef product descriptions; these vary for each question. The option of choice C, which is to choose neither A nor B, is included in all questions. The option of not making a purchase applies if neither descriptions of beef in alternatives A and B are preferred and this choice of "base" alternative C sets the origin or base of the utility scale. Louviere (1988), explains that the base alternative acts as a constant subtracted from the utilities of the other alternatives.

The orthogonal main effects experimental design imposes independence between the factors and assumes that interaction effects are negligible. Dummy

variables (-1, +1) are used to code the attribute levels so that the base alternative is exactly equal to the origin (see Louviere (1988) for a detailed discussion on effects coding). The fourth level of each attribute is omitted to avoid singularity. The model investigated here is a simple non-nested multinomial model which assumes that there is only one level in the decision process.

Data and Estimation Procedure

The data were obtained by means of the previously described survey conducted in Seoul, South Korea in the fall of 1995. The process involved administering a questionnaire through direct personal interview with over 40 executive chefs, purchasing managers, and others associated with major tourist hotels and restaurants. These establishments use high quality grain-fed beef similar to the product produced in Canada and they are regarded as leading institutions in the procurement of high quality beef.

The survey was translated into Korean and then cross-checked with local Edmonton Korean businesses to insure the accuracy of the translation. Respondents had the option of answering the questions in Korean or English. Each respondent answered questions from the semantic differential scale and from the stated preference.

The following groups of individuals participated in the quantitative portions of this survey. The respondents were:

- 22 Korean purchasing managers for Korean international hotels.
- 11 Korean executive chefs at Korean international hotels
- 12 non-Korean executive chefs at Korean international hotels

These individuals represent most of the market for four- and five-star international hotels in South Korea. All 42 participants who agreed to answer the stated preference questions were able to complete the task. Nearly all participants could

answer the semantic differential scale questions on beef from Australia and the U.S., but only slightly over half the participants could answer questions on Canadian beef. The survey results for the semantic differential scale methodology are reported in Tables 1 to 3 and the stated preference model results are in Table 5. The nonlinear logit procedure of the statistical program Limdep 7.0 (Greene, 1995) was used for estimation of the multinomial logit model.

Results and Discussion

The survey results provided a rich data set on perceptions of imported beef in a particular market segment. The application of the semantic differential scale methodology gave ratings for more than 20 different attributes related to beef products and country image. The stated preference approach provided information on four different attributes, each with four levels. The two sets of results complement each other. The semantic differential scale results are discussed first.

Overall, the results in Table 1 clearly show that beef from the United States is viewed as equal or superior to beef from Canada or the Australia. The U.S. beef was clearly rated to be superior on tenderness, marbling, flavour, food safety, variety of cuts, and packaging. The only area where the U.S. beef product was not viewed as nearly equivalent or superior was on price.

Conversely Canadian beef was rated to be relatively close to U.S beef in terms of quality (Table 1), however, it was not considered to be superior to the U.S. product. Only in muscle texture, muscle color, and fat color did Canadian beef rate slightly higher than U.S. beef. Essentially Canadian beef was perceived to be equivalent to U.S beef and the Canadian product was rated as superior to Australian beef in all areas except price, food safety, fat trim, variety of cuts, and packaging. Thus, Canadian beef quality is not at a major disadvantage in the international hotel market segment, but neither is it at a major advantage relative to U.S. beef. Canadian beef is viewed to be deficient in the areas of product packaging and variety.

The physical attributes of the product are not the only important attributes in marketing commodities internationally. Product service and promotion are key components of the marketing mix. Four questions on product service and promotion were presented to the respondents (see Table 2). Canadian beef suppliers received the lowest ratings with all ratings less than zero. Canada was rated as inferior to both Australian and United States suppliers on service and market promotion. The United States suppliers are clearly viewed to be superior to the suppliers from the other two countries with most U.S. ratings close to or greater than two.

Often individuals in another country have a general impression of a particular country. This country image can be measured and used to evaluate whether the image has favourable or negative implications for marketing in the foreign country (Papadopoulos et al., 1994). An example is the reputation that Germany has for precision and quality. The U.S. has the highest ratings on economic, technology, product quality, and trustworthiness attributes (see Table 3). Canada has the lowest ratings in these four areas. However, when respondents were asked about their interest in future relationships with a particular country, Canada was rated slightly higher than either the U.S. or Australia. Canadian suppliers do not appear to have to overcome major problems of country image in terms of marketing beef in Korea.

The stated preference model uses specially designed questions to elicit respondents' preferences for beef products and the relative importance attached to each attribute in the study (see Table 5). The coefficient estimates given in Table 5 express the relative effects of attributes on the probability of a buyer choosing either alternative A or B based on the specific attribute level. The log-likelihood ratio statistic in Table 6 indicates that the attributes examined in the model are jointly important in affecting consumer utility for purchasing beef products. The log likelihood functions are also used to determine a goodness-of-fit measure, the pseudo-R^2. The pseudo-R^2 value is 0.104 (Table 5), a reasonable fit for this type of model.

The stated preference results reveal that beef of Canadian and Korean origin does not have any significant effect on buyer's utility since there is no increase in the probability that buyers will purchase beef products from these sources. In fact, product of Canadian origin may even have a slightly negative impact on the decision to purchase the product. Beef products from the U.S. have a significantly positive effect on buyers' utility. There is a higher probability of a buyer purchasing beef from the U.S. than from either Canada or Australia given the same meat quality, price, and customization. Beef from Australia has a significant negative effect on the probability of purchase.

The price effects from Table 5 indicate that lower prices increase buyers' utility. Product grade is important in affecting utility; the estimated coefficients on higher beef grades have a positive sign while lower grades have a negative sign. Equivalent to prime, the highest quality, is the most preferred while the select grade is the least preferred. The product specification coefficients indicate that products with no custom cuts are preferred by Korean institutional buyers. The estimated coefficient on frozen beef without custom cuts has a positive sign and is statistically significant while the estimated coefficient on beef with custom cuts has a negative sign and is also statistically significant. This result may be explained by the fact that the Korean marketing infrastructure cannot as yet easily handle fresh chilled product while maintaining product quality.

The stated preference results are consistent with the results from the semantic differential scaling approach. The semantic differential scaling results showed that respondents ranked the U.S. higher than Canada or Australia in terms of reputation, promotional activities, and general product quality.

Observations by the interviewer and the completed survey results indicated that nearly all respondents answered the stated preference questions (Table 5). However only half of the respondents were able to answer the semantic differential scale questions on Canadian beef quality. Stated preference survey instruments may have an advantage in the investigation of markets over semantic

differential scale questions in situations where buyers are not familiar with some of the described products. The stated preference approach frames hypothetical questions that are relevant to the buyer and that include product descriptions that may not yet be available to the buyer. Thus the hypothetical nature of the stated preference approach can be of considerable advantage in some market assessment studies. One trade-off is that stated preference includes fewer attributes and, in this sense, provides a data set that is less rich in terms of the number of attributes evaluated.

Marketing Implications for Canadian Beef in Korea in the International Hotel Segment

The international hotel and restaurant market segment in South Korea is a target market for the Canadian beef industry. Results presented here highlight several challenges facing the Canadian beef industry. The U. S. has a dominant position in the market. This dominance applies not only in terms of market share, but reflects buyers' perceptions regarding the product--Canadian product is not generally viewed as superior to U.S. product. In the areas of packaging and supplying a variety of cuts, Canada is viewed as inferior by respondents. Surprisingly, Canadian food safety standards are also viewed as lower than those in the U.S. or Australia. Personal communication with representatives of the Canadian industry would not support this viewpoint of the buyers.

Thus, in the product area, marketing focus is required to improve packaging, cut variety, and awareness of Canadian food safety standards. The Canadian suppliers' reputation in beef service and promotion is also very weak.

The stated preference results confirmed that buyers for the hotel and restaurant market segment demand high quality meat but are nonetheless sensitive to price. Buyers on average still prefer frozen product. Future changes in the marketing infrastructure may change this, but the current preference is for frozen product that is not customized for each individual hotel.

Conclusions

There is a relatively higher probability of Korean buyers for the higher end hotel and restaurant market purchasing beef from the U.S. rather than from Canada or Australia. The stated preference and semantic differential analysis both confirm the importance of U.S. beef in the Korean international hotel market. The Korean hotel industry was also found to prefer lower prices and high-grade beef products. For Canada to penetrate the Korean market and compete effectively in the beef market, the issues of price and grade, as well as Canada's image in Korea, have to be seriously addressed. This may entail aggressive targeted promotional activities to make Canada known to Korean buyers as a producer of high quality beef.

Further analysis based on the stated preference model and data series described above to assess possible nesting in the purchase decision by Korean buyers is being conducted. The stated preference model applied in this paper assumes that there is no structure in the decision process and that the model is non-nested. Further analysis will also be pursued to develop optimal product profiles for Canada relative to the U.S.; these could be the basis for development of a marketing strategy to enhance the competitiveness of Canadian beef in the Korean market.

Table 1. Semantic Differential Scale Beef Product Quality Evaluation[1]

Attribute	Canada Rating	U.S. Rating	Australia Rating	Significance[2]
Tenderness	0.35	1.62	-0.55	**
Marbling	0.81	1.14	-0.48	**
Muscle Texture	1.10	1.07	-0.05	**
Muscle Color	0.84	0.71	0.24	
Fat Color	0.72	0.69	-0.02	
Fat Trim	0	0.1	0.13	
Flavour	1.04	2.05	-0.07	
Food Safety Standards	0.46	0.93	0.86	
Price	-0.64	-1.98	0.60	**
Variety of Cuts	-0.04	1.34	0.61	**
Product Packaging	1.17	1.7	1.12	
Overall Beef Quality	0.64	2.09	0.16	**

1. The average response rate to Canadian questions was 22. 42 respondents on average were able to answer the questions on U.S. and Australia. There was very little variance around the response rate. The ratings are the mean responses from a 7 point scale from -3 to +3.

2. ** is significantly different from each other at the 5 percent level.

Table 2. Semantic Differential Scale Beef Service/Promotion Evaluation[1]

Attribute	Canada Rating	U.S. Rating	Australia Rating	Significance[2]
Service and Assistance	-1.40	2.07	0.86	**
Reputation	-0.45	2.25	-0.11	**
Effectiveness of Promotion	-1.00	1.84	0.32	**
Awareness of Promotion	-1.64	2.16	0.82	**

1. The average response rate to Canadian questions was 43. 44 respondents on average were able to answer questions on U.S. and Australia.. There was very little variance around the response rate. The ratings are the mean responses from a 7 point scale from -3 to +3.

2. ** is significantly different from each other at the 5 percent level.

Table 3. Semantic Differential Scale
Overall Perceptions on the Exporting Country[1]

Attribute	Canada Rating	U.S. Rating	Australia Rating	Significance[2]
Management of Economy	0.63	1.86	1.00	**
Level of Technology	0.83	2.36	1.00	**
Desire for Future Relationship	1.88	1.51	1.53	
General Country Product Quality	0.36	1.09	0.58	
Trustworthiness	0.53	1.72	0.80	

1. The average response rate to Canadian questions was 40. 44 respondents were able to answer the questions on U.S. and 43 respondents on average answered the questions on Australia.. There was very little variance around the response rate. The ratings are the mean responses from a 7 point scale from -3 to +3.

2. ** is significantly different from each other at the 5 percent level.

Table 4. Factor Levels/Descriptions for Stated Preferences

FACTORS	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Product Origin	Canada	United States	Australia	Korea
Product Price	40% less than previous price paid	20% less than previous price paid	Same price as previous price paid	20% more than previous price paid
Product Grade	U.S. prime (slightly abundant marbling)	U.S. choice (modest marbling)	U.S. choice (small marbling)	U.S. select (slight marbling)
Product Specification	Frozen with no custom cuts	Fresh/chilled with no custom cuts	Frozen with custom cuts	Fresh/chilled with custom cuts

Table 5. Results of Estimated Non-linear Logit Model

VARIABLE	COEFFICIENT ESTIMATE	STANDARD ERROR
Origin Attribute		
Canada	-0.120	0.149
USA	0.327*	0.150
Australia	-0.387*	0.153
Korea	0.180	0.149
Price Attribute		
40% less than previous	0.705*	0.150
20% less than previous	0.240	0.144
Same as previous	-0.198	0.155
20% more than previous	-0.747*	0.168
Grade Attribute		
Prime - marbling	0.587*	0.144
Choice - modest marbling	0.097	0.151
Choice - small marbling	-.009	0.151
Select - slight marbling	-0.675*	0.161
Specification Attribute		
Frozen with no custom cuts	0.260[a]	0.140
Fresh/chilled with no custom cuts	0.152	0.153
Frozen with custom cuts	-0.309[a]	0.160
Fresh/chilled with custom cuts	-0.103	0.151
Log likelihood function	-338.66	
Pseudo-R^2	0.104	

* Indicates statistical significance at 95 percent confidence level.
[a] Indicates statistical significance at 90 percent confidence level.

Table 6 Results of Log Likelihood Ratio Test

Hypothesis	Log likelihood function of restricted model (L_R)	Log likelihood function of unrestricted model (L_U)	Chi-Squared statistic*
Ho: All Slope coef. =0	-377.92	-338.66	78.52

* critical value at 95 percent confidence level and 13 degrees of freedom is 22.36.

Figure 1. Semantic Differential Scale Example Question

TENDERNESS							
	Tough			Tender			
Canada	:-3___	:-2___	:-1___	:0___	:1___	:2___	:3___
USA	:-3___	:-2___	:-1___	:0___	:1___	:2___	:3___
Australia	:-3___	:-2___	:-1___	:0___	:1___	:2___	:3___

Korean attitudes toward imported beef from Canada, United States and Australia are examined in a series of questions. Individuals ranked each question on a 7-point scale from -3 to 3. This question asked the respondents to rank the respective countries on the beef attribute of tenderness using the bipolar adjectives tough versus tender to describe the range of choices.

Figure 2. Stated Preference Example Question

Assume that the following choices are the only ones on your next order for grain-fed beef short ribs. Would you choose A, B, or would you choose neither?

Product features	**Choice A**	**Choice B**	**Choice C**
Country of Origin	Canada	United States	
Price	20% less than last price paid	40% less than last price paid	
Grade	Equivalent to *Prime* (marbling: modest)	Equivalent to *Select* (marbling: slight)	Neither Choice A nor Choice B
Product Specification	Frozen with custom cuts	Frozen with custom cuts	
Check only one	**A** _____	**B**_____	**C**_____

Stated Preference: Individuals were given a series of questions that asked them to choose between different beef product profiles. The profiles which follow a particular statistical design, included country of origin, price, product quality and fresh/frozen.

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