

The Perceptions of Food in Korea : An Investigation of Taste and Nutrition

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ABSTRACT

The present study investigated the perceptions of food adopted by Koreans using the characteristics of taste and nutrition. Two hundred and nine Korean subjects were surveyed including University students and adults from many diverse social backgrounds. The subjects sorted pictures of foods according to two conditions, how tasty and then how nutritious they thought the foods were using the Q-method. These pictures included two sets, one for individual food items and the second depicting typical Korean meals, yielding a total of four conditions. This methodology effectively addressed any language barrier as pictures and words in both Korean and English were used. It was an effective tool for allowing the identification of perceptual structures and indicating how prevalent they were across samples. The data were factor analysed and the resulting factor scores interpreted. Meat was regarded positively in all four conditions. Individual sweet foods were preferred by younger subjects while individual traditional foods were preferred by older subjects. Traditional Korean meals were also favoured while processed meals were not. Nutritionally, proteins were more valued than carbohydrates, fibre and vitamins. Meals that contained protein and were regarded as filling and sustaining were regarded positively. The implications for nutrition education were discussed.

KEY WORDS : food perception · taste · nutrition · nutrition education.

Introduction

Nutrition encompasses both food and behaviour. Food is made up of nutrients but also has

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social and cultural roles. Nutritional behaviour, however, refers to the actual act of consuming food involving food choice that determines which foods are actually taken into the body¹⁾. Indeed, in many cultures it is believed that 'you are what you eat' and some foods are eaten or avoided because of this²⁾. As Murcott³⁾ succinctly states many foods such as lentils, steak, duck eggs, or oysters are protein sources and can be interchanged from the nutritionists' perspective. However, these food items may not form part of many cuis-

nes.

Generally, much of the research that has been undertaken in the nutritional sciences has concentrated on clinical populations including investigations of behaviours related to cardiovascular disease and obesity⁴⁾⁵⁾. However, recent research emphasises the need for changes in the general populations' intakes of nutrients⁶⁾. Public health campaigns typically inform people about which behaviours need to be changed. However, these behaviours are often modified out of their cultural context and therefore with little regard for their ease or difficulty of change.

The aims of this study were to investigate the content of perceptions of food and to provide an indication of how shared they are within the general population. Once these factors are identified an evaluation can be made of the congruence of these perceptions with the goals of nutrition education. This study is part of a larger cross-cultural comparison of food perceptions between Korea and Australia. Differences in cuisines may account for many of the differences in perceptions but as Korea becomes more affluent and part of the 'supermarket monoculture'⁷⁾ their perceptions may change. This paper reports the results of the study conducted in Korea.

Perceptions of food can be influenced by both culture and social interactions. Culturally shared knowledge exists within societies which define the foods that are edible or inedible¹⁾ and these can be broadly referred to as cuisines. Fischler⁸⁾ maintained that cuisines could be thought of as social knowledge of food which confer "...culture-specific taxonomies and complex sets of rules about how to collect, prepare, combine and consume foods".

Fischler⁸⁾⁹⁾ believed that the purpose of cuisines was to offer both familiarity and variety to the diet. Cuisines offered 'flavour principles'¹⁰⁾

which were familiar to the cultural group so new foods could be prepared in familiar ways. The flavour principles common to a culture and expressed through a cuisine can influence the tastes that are enjoyed by the members of that culture.

Cuisines also provide the knowledge of which foods are safe to eat while also offering variety to the diet. Therefore, individuals do not have to learn which foods are edible as cuisines and culture provide the framework of knowledge for this.

Socially shared perceptions of food can be associated with Moscovici's¹¹⁾ social representations theory. Social representations refer to ideas and knowledge that are shared by a subgroup, society or culture depending on their function and content¹²⁾. Members of a culture may share knowledge or a general idea of the tastes that are acceptable and which foods could make up a meal or a particular dish. Augoustinos and Innes¹²⁾ maintain that even novices (including novices in food preparation in this case) will have knowledge consistent with a shared representation, including nutritional knowledge of food.

Q-methodology is a useful tool for examining subjects' own viewpoints relating to a particular problem rather than using a questionnaire based on the researcher's own viewpoint¹³⁾. The Q-method was used as it was an effective way to address any language barrier as both pictures and words from both Korean and English were used. This method is a useful tool for allowing the identification of shared perceptions. In Q-methodology subjects are entered as variables. Factor analysis categorizes subjects according to the similarity of their responses and the computation of factor scores allows for the interpretation of the underlying perceptual structure. The perceptions of taste and nutrition were investigated in Korea.

Method

1. Subjects

Two hundred and nine Korean subjects were selected from four groups ($\bar{X}_{age}=31.6$ years, $s=11.0$; range 18-64 years). Sixty were young female students (YF: $\bar{X}_{age}=24.6$ years, $s=2.2$) selected from two universities in Seoul-Ewha Women's University and Seoul National University. All were taking their degree in Food and Nutrition. Sixty were young male students (YM: $\bar{X}_{age}=23.7$ years, $s=2.8$) selected from Seoul National University. All were studying generalist degrees. Fifty were older females (OF: $\bar{X}_{age}=40.8$ years, $s=8.8$) and were selected from diverse backgrounds including those connected with the National Office of the Korean YWCA, some of the ancillary staff of Ewha and Seoul National Universities, or housewives known to the author through friends. Thirty-nine were older males (OM: $\bar{X}_{age}=42.9$ years, $s=11.2$) and were ancillary staff of Seoul National University, Middle-school teachers, or known to the author through friends.

2. Materials

1) Marker Cards

A row of eleven marker cards, marked according to the distribution presented in Fig. 1 was placed at the top of a large desk. The +5, 0 and

-5 marker cards had the appropriate words printed on them in Korean and English. Two sets of end marker cards were made indicating which sorting instruction was being conducted-either taste or nutrition. The -5 marker card was placed on the extreme left and the +5 on the extreme right.

2) Stimulus Cards

The Q-samples consisted of two sets of fifty pictures of foods. The pictures were either photographs or pictures from books. The first was a set depicting individual foods only. These foods were selected from a list of 100 of the most frequently consumed foods per household based on national data¹⁴. This set contained some Western foods and are listed in Table 1.

The second set of pictures were commonly consumed Korean meals (this was checked by several Korean nationals) and the pictures were based on those in a book by Hwan¹⁶. This set also contained some Western meals (Table 2).

The cards in both sets were numbered from 1-50 and had the Korean and English equivalent printed on them underneath the photograph. In each set the cards were numbered randomly to avoid any links arising between a numerical sequence and groups of foods. All of the cards measured 13cm x 10.5cm and were made from white, unruled index cards. Translations of all Korean words were checked by two Korean nationals.

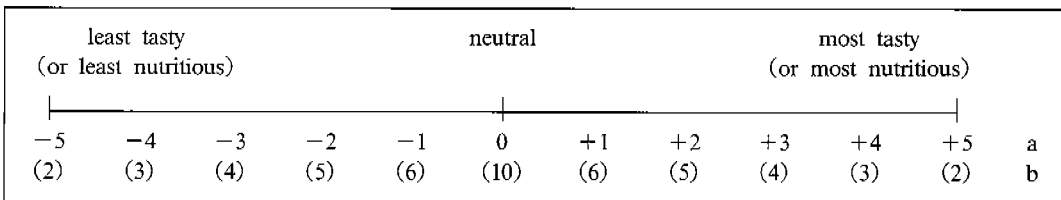


Fig. 1. Q-distribution for the test session.

a : The value (and words) printed on each of the marker cards.
 b : Number of items to be placed underneath each marker card.

Table 1. The individual food items used in the Q-sample

Rice	Pork	Garlic	Korean lettuce	Toasted seaweed
Sweet biscuits	Potato	Chicken	Candies	Zucchini
Chinese cabbage	Sponge cake	Chocolate	Cucumber	Jam
Milk	Green onion	Mandarins	Chestnuts	Strawberries
Apples	Beef	Squid	Anchovies	Ginseng
Radish	White onion	Yoghurt	Processed ham	Mushrooms
Ice-cream	Fish	Bread	Green peppers	Peanuts
Bean sprouts	Dry biscuits	Potato chips	Eggplant	Tomatoes
Tofu	Octopus	Carrots	Grapes	Noodles
Eggs	Spinach	Canned tuna	Sweet bun	Frankfurts

Table 2. The Korean meals used in the Q-sample

Barbecued beef	Frozen pork Cutlets	Braised eggplant	Stir fried octopus	Sweet rice
Fried bean curd	Spicy meat soup	Cold, cooked squid	Fried chips	Fish stew/soy sauce
Hamburgers	Fern shoot salad	Mandoo snack	Cucumber kimchi	Hot radish salad
Dumplings in broth	Fish fingers	Dried pollack stew	Vermicelli combo.	Noodles in soup
Spicy fish soup	Kimchi pancake	Bean curd soup	Instant soup	Braised zucchini
Rice cakes	Fried chicken	Pizza	Grilled fish	Ginseng salad
Instant noodles	Cooked rice	Grilled pork	Green onion panc.	Short ribs soup
Rice/vegetable mix	Food in batter	Seaweed/rice roll	Watercress salad	Cabbage kimchi
Mushroom salad	Spaghetti meal	Seas. bean sprouts	Seasoned ark shell	Stir fried rice
Radish Kimchi	Kimchi stew	Instant noodle/dish	Instant cup meal	Acorn curd

3. Procedure

The instructions for the session were modified from those presented in McKeown and Thomas¹⁶⁾. Subjects completed four Q-sorts according to the diagram presented in Fig. 2. The order of presentation of the conditions were randomly allocated across subjects to eliminate the effects of order and fatigue. The set of instructions, written in Korean, were shown to each subject together with a verbal summary explaining the overall procedure emphasizing the words ‘most tasty’, ‘least tasty’, ‘most nutritious’ and ‘least nutritious’. The subjects were instructed to sort the foods from most to least tasty and from most to least nutritious according to the condition they were completing at the time. Subjects were further instructed that there were no right or wrong answers and that their own opinions were sought. The results

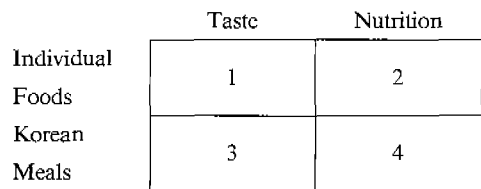


Fig. 2. The four Q-sorts completed by each subject.

were recorded for each of the four responses and the subjects were asked to complete a short background questionnaire asking for their age, sex and whether they were the individual in charge of the cooking in their home. The cards were shuffled after each completion of the Q-sort and between subjects. The overall procedure lasted for thirty minutes on average.

4. Data Analysis

The data from all 209 subjects for each of the

four sorting conditions were factor analysed using SPSS-X Version 4.0 following the method for Q-sort analysis¹³⁾¹⁶⁾. The subjects were entered as variables and the interrelationships between them investigated. The factoring method used was principal components with varimax rotation.

Results

The number of factors relevant to each of the sorting conditions was determined subjectively by analysing the scree plots produced. To determine how each food item was related to each factor, i.e. to construct a composite Q-sort for each factor, factor scores were calculated for each food item according to the current methodology¹³⁾¹⁶⁾. The subjects who loaded solely and significantly on only one factor are said to define that factor¹⁶⁾, as they all essentially sorted the food items in the same way. Loadings in excess of $2.58(SE) = \pm 0.36$ were regarded as significant ($p < 0.01$, two-tailed). Following Brown's¹³⁾ recommendations only those factors with more than ten subjects loading significantly on each one were interpreted as their reliability is quite high.

The factor scores were normalised scores dependent upon the strength of association of each subject with that factor. The resulting factor scores represent a composite of the way all of the subjects sorted the food items. This allows interpretation of the Q-sort for investigating the underlying meaning of the factor. The food items that received a factor score of ± 3 or greater were considered for interpretation of each factor.

1. Factor analysis-interpretation of the factor scores

1) Individual foods : taste rankings-3 factors accounted for 47.1% of total variance (Table 3). Factor A positively highlighted some meat and

sweet fruits and together with some sweet, fatty confections like icecream indicating that it could be labelled *Sweet and/or fatty vs. Bitter*. It was interesting to note that more young people defined this factor (76%).

Factor B could be labelled *Traditional, natural vs. Modern, processed* and appeared to contain cognitive, rather than taste elements only. Seventy-five percent of the subjects defining this factor were older and were likely to prefer the taste of traditional foods, including ginseng which is naturally bitter.

Factor C emphasized sweet plant foods while

Table 3. Factor scores for each food greater than ± 3 for food and taste for all subjects including appended subject numbers

Food/Taste all subjects			
Scores	A	B	C
+5	Beef	Fish	Apples
	Strawberries	Dried seaweed	Strawberries
+4	Apples	Beef	Mandarins
	Yoghurt	Octopus	Tomato
	Grapes	Chestnuts	Grapes
+3	Chicken	Apples	Potato
	Mandarins	Strawberries	Carrots
	Dried seaweed	Ginseng	Cucumber
	Ice cream	Mushrooms	Dried seaweed
-3	Spinach	Chocolate	Green onion
	Anchovies	Bread	Chocolate
	Zucchini	Sweet bun	Candies
	Ginseng	Frankfurts	Jam
-4	Radish	Sweet biscuits	Pork
	White onion	Sponge cake	Garlic
	Garlic	Potato chips	Frankfurts
-5	Green onion	Dry biscuits	Proc. ham
	Eggplant	Candies	Ginseng

Factor A : n=54 subjects-12YF, 29YM, 10OF, 30OM (76% young, 24% older)

Factor B : n=44 subjects-3YF, 8YM, 17OF, 16OM (25% young, 75% older)

Factor C : n=11 subjects-7YF, 2YM, 1OF, 1OM (82% young, 18% older)

regarding meats, confectionery, and some bitter plant foods, including ginseng, negatively. Varieties of seafood received neutral rankings. This factor could be labelled *Sweet plant foods vs. Animal flesh foods*. The majority of subjects defining this factor were younger(82%).

2) Individual foods : nutrition rankings-2 factors accounted for 59.4% of total variance(Table 4).

Factor D positively highlighted the nutritional value of protein, including meat and vegetable forms, but traditional foods, including ginseng and fish, were also considered to be important. The importance of processed foods was exemplified

with the negative ranking attributed to frankfurts, a source of protein but a processed food. Bread, rice and noodles were also regarded negatively. This factor could be labelled *Protein, traditional vs. Carbohydrate, processed*.

Factor E could be interpreted as purely *Protein vs. Vegetable* as all protein foods, including processed meat were ranked positively. These positive ranks also included peanuts, tofu and rice which all contribute some plant protein. This indicates that protein was the major nutrient defining this factor.

3) Korean Meals : taste rankings-3 factors accounted for 47.0% of total variance(Table 5).

Factor F features a clear distinction between traditional meals that form part of the cuisine of South Korea, and processed, instant foods which received negative rankings. This factor could therefore be classified as *Traditional vs. Western, processed* and was defined predominantly by older subjects(64%).

Factor G could be interpreted to distinguish between *High satiety vs. Low satiety*, signalling how filling a particular meal may be. Positive rankings were given to many meat and rice dishes while negative rankings were attributed mainly to side dishes and snack foods-meals that may be regarded as non-filling.

The last factor highlighted the differences between meat and vegetable dishes. Meat, seafood and 'fast foods' including hamburgers, fried chicken and pizza, were regarded positively while many noodle, rice and side dishes received negative ranks. This factor could be referred to as simply *Meat vs. Vegetables*.

4) Korean Meals : nutrition rankings-2 factors accounted for 59.4% of total variance(Table 6).

Factor I could be labelled *Meat(protein) vs. Vegetable* but may be also associated with meals which are filling. These could be thought of as

Table 4. Factor scores for each food greater than ± 3 for food and nutrition for all subjects including appended subject numbers

Food/Nutrition all subjects		
Scores	D	E
+5	Milk	Pork
	Fish	Beef
+4	Tofu	Eggs
	Eggs	Fish
	Beef	Chicken
+3	Chicken	Milk
	Carrots	Canned tuna
	Anchovies	Proc. ham
	Ginseng	Frankfurts
-3	Ice cream	White onion
	Sweet bun	Cucumber
	Jam	Green peppers
	Frankfurts	Eggplant
-4	Sweet biscuits	Chinsec
		Cabbage
	Dry biscuits	Garlic
	Potato chips	Korean lettuce
-5	Chocolate	Radish
	Candies	Green onion

Factor D : n=63 subjects-23YF, 10YM, 20OF, 10OM (68% female, 32% male)

Factor E : n=48 subjects-9YF, 17YM, 10OF, 12OM (40% female 60% male)

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Table 5. Factor scores for each meal greater than ± 3 for meals and taste for all subjects including appended subject numbers

Males/Taste all subjects			
Scores	F	G	H
+5	Kimchi stew	Fried chicken	Barbecued Beef
	Grilled fish	Pizza	Stir-fried Octopus
+4	Barbecued Beef	Barbecued Beef	Fried chicken
	Fish stew in Soy sauce	Vermicelli Combo.	Short-ribs Soup
	Spicy fish Soup	Rice with Vegetables	Vermicelli Combo.
+3	Rice with Vegetables	Kimchi stew	Spicy meat Soup
	Bean curd Soup	Bean curd Soup	Cold, cooked Squid
	Stir-fried Octopus	Seaweed/Rice roll	Pizza
	Cabbage Kimchi	Short-ribs Soup	Grilled fish
-3	Frozen pork Cutlets	Frozen pork Cutlets	Instant Noodles
	Fish fingers	Fern-shoot Salad	Fern-short Salad
	Mandoo Snack	Braised Eggplant	Braised Eggplant
	Instant soup	Mandoo Snack	Braised Zucchini
-4	Hamburger	Spaghetti Meal	Bean sprouts
	Instant Noodles	Instant soup	Instant Noodles (dish)
	Instant cup Meal	Watercress Salad	Watercress Salad
-5	Spaghetti Meal	Instant cup Meal	Instant cup Meal
	Instant Noodles (dish)	Ginseng salad	Hot Radish Salad

Factor F : n=53 subjects-8YF, 11YM, 14OF, 20OM (36% young, 64% older)

Factor G : n=31 subjects-17YF, 10YM, 2OF, 20OM (87% young, 13% older)

Factor H : n=12 subjects-3YF, 6YM, 2OF, 1OM(75% young, 25% older)

Table 6. Factor scores for each meal greater than ± 3 for meals and nutrition for all subjects including appended subject numbers

Meals/Nutrition all subjects		
Scores	I	J
+5	Barbecued Beef	Ginseng salad
	Short-ribs Soup	Grilled fish
+4	Fried Chicken	Fish stew in Soy sauce
	Grilled pork	Barbecued Beef
	Grilled fish	Sauteed Mushrooms
+3	Hamburger	Short-ribs Soup
	Spicy fish Soup	Fried bean Curd
	Spicy meat Soup	Spicy fish Soup
	Fish stew in Soy sauce	Stir-fried Octopus
-3	Radish Kimchi	Instant cup Meal
	Braised Eggplant	Hamburger
	Bean sprouts, Seasoned	Fish fingers
	Cucumber Kimchi	Instant soup
-4	Instant Noodles	Mandoo Snack
	Fern-short Salad	Frozen pork Cutlets
	Instant Noodles (dish)	Spaghetti Meal
-5	Watercress Salad	Instant Noodles (dish)
	Hot radish Salad	Instant Noodles

Factor I : n=38 subjects-8YF, 10YM, 40OF, 16OM(32% female, 68% male)

Factor J : n=32 subjects-5YF, 14YM, 90OF, 40OM(44% female 56% male)

masculine foods and indeed this factor was defined by a majority of males (68%). Positive rankings were attributed to meat and seafood dishes and negative ranks were given to many vegetable side dishes, including cabbage kimchi and instant meals.

Factor J was highlighted by traditional meals including ginseng salad, grilled meats and soups. Negative rankings were assigned to many (but not all) side dishes and all instant meals including hamburgers. This factor could be defined as *Traditional vs. Modern, process*, but comprised an even number of young and older subjects.

Discussion

1. Taste

The factors for both individual foods and Korean meals accounted for more than 47% of the shared variance of the 209 subjects. This can be said to be quite high as individual experiential factors may mean that one person likes one food while another does not. This result indicates that despite the subjects' own experiences with the individual foods and Korean meals there were elements in common between subjects. In the individual foods condition sweet items featured prominently especially among the younger subjects and included both sweet, natural foods-like fruit, and confectionery.

This was also found in ten year old Australian children. The researchers¹⁷⁾ investigated the rules that determine which foods can be combined together to form a meal. One of their results included a sweet/savoury dimension indicating that these foods cannot 'go together'. This finding in a culture quite different from Korea is supported by Rozin and Vollmecke¹⁾. They state that the liking for sweet tastes represents an innate human taste bias which is adaptive because sweet-

ness is almost always associated with a source of calories. It is expected that people will like sweet foods, whether naturally sweet, or sweetened confectionery. Rozin and Vollmecke¹⁾ continue by stating that among older people the level of sweetness preferred varies greatly. In this study younger people ranked sweeter foods more highly.

Meat received mainly positive ranks but there were some negative or neutral ones, while vegetables received negative ranks. When meat was associated with tradition it received positive ranks, especially beef, but when associated with notions of animal flesh (Factor C) meat received negative rankings.

Koreans originated from nomadic tribes and traditionally beef was of major importance both for their farms as work animals and as a source of prized food¹⁵⁾. This positive regard for meat was also reflected in the rankings of seafood, especially in Factor B the factor associated with tradition. The Korean peninsula is surrounded by the sea on three sides and provides a rich abundance of all seafood and seagrasses¹⁵⁾ of which both received positive rankings.

It is expected that the preference for meat is a world-wide phenomenon as most cultures include meat somewhere in their cuisines even if all members of that culture do not eat meat¹⁸⁾. It has also been suggested that there may be an inbuilt tendency for humans to eat meat¹⁾.

Traditional foods that were ranked positively included ginseng, which is a naturally bitter food. However, many older subjects regarded ginseng as being quite tasty. Research has suggested that there is an innate taste bias against consuming bitter substances¹⁾ which also has adaptive implications as bitterness is often associated with the presence of toxins. Ginseng is thought to have beneficial health and medicinal effects so there is an advantage in its consumption¹⁵⁾. This affect-

tive component of reversing an innate rejection has been studied in the preference for eating chilli peppers¹⁹⁾. The knowledge that ginseng may be beneficial, not harmful, may be enough to convince some people to consume it despite its taste. This may produce an affective shift from an avoidance based on dislike to a consumption based on positive associated consequences¹⁾¹⁹⁾. Indeed, older people were more likely to be associated with the traditional ideas of Factor B. Traditional foods are familiar in many aspects including taste. Traditional flavours and foods are also a way of defining a cultural group through the ethnic markers of a cuisine¹⁰⁾. It is highly likely that all of these beliefs will be held by older people.

The Korean meals condition provided factors that were similar to the individual foods condition. Traditional meals were regarded positively, especially by the older subjects. Meals regarded as filling were assigned positive rankings. Booth et al²⁰⁾ have demonstrated an enhanced liking for flavours paired with filling foods, in both adults and children. The positive post-ingestional cues conferred by a feeling of fullness can enhance preferences for that food such that it will be consumed again on another occasion. Meat dishes were also regarded positively, especially those from traditional Korean cuisine. Most spicy foods were ranked positively reflecting an important aspect of Korean cuisine. Red pepper is one of the basic flavouring agents used in Korean meals and it is not unexpected that these meals will be preferred as the attachment to traditional flavourings is very strong¹⁰⁾.

2. Nutrition

The factors from both individual foods and Korean meals each accounted for nearly sixty percent of the shared variance of the 209 subjects. Both conditions had two factors each, indicating

that a small number of factors summarized the ideas of nutrition among the subjects. These perceptions were widely shared among the sample.

The individual food condition indicated the importance of protein of both animal and vegetable varieties. Most vegetables and carbohydrate foods received negative rankings. A nationwide survey of the daily diet of Koreans indicated that over the last twenty years(1971–1990) the carbohydrate and vegetable intake has decreased and the protein intake has increased. The percentage of animal protein intake has more than tripled, the percentage of energy from meat alone has increased 20% while the percentage of energy from cereals has decreased. However, carbohydrate consumption still exceeds protein consumption²¹⁾. Korea is now more affluent than it was in the 1970's and the ability to buy more meat is a reflection of this. Meat is still quite expensive but a higher level of disposable income allows a higher level of meat consumption.

This trend to regard meat positively was reflected in the rankings of Korean meals. Meals that were perceived to be more filling were also regarded positively and many of these meals contained meat. Many of the males regarded meat dishes positively and could reflect the traditions of Korean society. Males are the traditional workers and they or their wives, or both may believe that they require a higher level of meat in their diet to enable them to function adequately in their careers and occupations.

Conclusions

Overall, the striking high regard for meat and protein as both tasty and nutritious may reflect a perception of the goodness of meat. If the trend of increasing meat consumption and decreasing

amount of energy from carbohydrates continues then this would appear to be contrary to the goals of nutrition educators. The nutrition educators of many Western nations, including Australia, are trying to reduce the percentage of energy from animal sources²²⁾.

The current(1990) percentages of dietary energy consumption by Koreans are protein 16.9%, fat 13.9%, and carbohydrate 69.2%. Plant foods contribute most of the energy intake in their diet(86.5%)²¹⁾. These values are the envy of many affluent Western societies. For example, in Australia the current(1990) percentages of dietary energy consumption for men(women are very similar) are protein 16.1%, fat 34.3% and carbohydrate 44.4%²³⁾. Most of the energy intake comes from meat, dairy foods, bread and sugars. Even though the protein intakes of the two nations are similar the proportions of protein derived from animal sources are very different. Koreans derive most of their protein from plant and fish sources while Australians protein sources typically are meat and meat products and dairy foods leading to a higher fat intake²¹⁾²³⁾. The percentage of fat from animal sources is usually one of the main concerns for nutrition educators. However, if the perception of Koreans is that meat is more tasty and nutritious than rice, noodles and vegetables then these percentages may change helped by their rising affluence as has been demonstrated before⁷⁾. Indeed, as Grundy²⁴⁾ states with the increasing 'westernization' of Asia coronary heart disease 'is increasing at an alarming rate'. A program to make Koreans aware that their present national diet is highly adequate and currently the envy of many affluent nations may be necessary(if further research of a similar nature reveals the same trends). Indeed, even if the same dietary trends continue, nutrition education may be necessary in an attempt to change these patterns.

Gussow and Contento⁷⁾ note that as urbanization increases people's knowledge of foods becomes divorced from the site of food processing. The evaluation of the nutritional value of foods in countries which are part of the 'supermarket monoculture' will become increasingly more difficult. Korea is experiencing a period of rapid urbanization and increasing changes in the foods available are apparent. Nutrition education will need to address these problems if dietary adequacy is to be maintained in Korea. The question that will need to be asked is: should Korea act now before it has a dietary problem at the population level or wait until a problem develops?

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한국인의 음식인지도 : 맛과 영양에 대한 조사

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본 연구는 다양한 사회적 배경을 가진 성인 및 대학생 209명을 대상으로 식성과 영양의 측면에서 한국인의 음식 인지도를 조사한 것이다. Q-방법을 이용하여 선정된 식품들의 사진을 대상자의 의견에 따라 어느 것이 더 맛있겠는가와 어느 것이 더 영양가가 있겠는가 하는 두가지 조건에 따라 배열하게 하였다. 이 사진들은 두 별로 구성되어 있는데, 하나는 각 음식 재료에 관한 것이며, 다른 하나는 일반적인 한국 음식으로 구성된 것이다. 따라서 본 조사는 4가지 조건하에서 이루어졌다. 본 조사는 한국어 및 영어를 병기하고, 사진을 이용함으로써, 언어 장벽을 효과적으로 극복하였다. 이러한 방법은 인식 구조를 파악하고, 인식의 분포를 나타내는데 매우 효과적이다. 수집된 자료를 인수해석(factor analysis)을 통해 인수치를 추출하고, 이를 분석하였다. 육류는 모든 조건하에서 선호되었으며, 단 음식 재료가 젊은 층에서 선호되는데 반해 전통적인 음식재료는 장년층에서 선호되었다. 전통적인 한국음식은 선호되는데 반해, 가공식품은 그렇지 못하였다. 영양의 측면에서는 단백질이 탄수화물이나 섬유소 및 비타민보다 높이 평가되었다. 단백질을 많이 포함하고 있거나, 체력을 유지시켜주는 것으로 여겨지는 음식이 선호되었다. 본 연구의 영양교육에 관한 측면도 논의되었다.

중심단어 : 음식인지도 · 맛 · 영양 · 영양교육.