

A survey on the Status of Utilization and Consumers' Opinions for Commercial Soup Stock

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상품화된 육수의 이용 현황 및 소비자 의견 조사

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Abstract

본 연구는 상품화된 육수 재료의 이용 현황 및 소비자 의견을 조사하기 위하여 수행되었고 이를 위해 서울에 거주하는 500명의 주부를 대상으로 설문조사를 실시하였다. 그 결과, 사용하는 제품의 종류는 분말형이 가장 많았고 시간 절약과 편리함이 상품화된 육수재료를 사용하는 가장 주된 이유였다. 또한 육수 재료를 사용하는 방법으로는 육류로 만든 육수에 섞어서 사용하는 방법이 가장 많이 쓰이고 있었다. 상품화된 육수 재료의 기호도에 대해서는 응답자의 81%가 상품화된 육수에 대해 '좋아하지 않는다' 라고 하였다. 좋아하지 않는 가장 큰 이유는 '침가제에 대한 염려와 인공조미료 때문' 이었다. 연령이 높고 결혼지속년수가 길수록 상품화된 육수 재료를 좋아하지 않는 비율은 높아졌다. 상품화된 육수가 품질만 보장된다면 응답자의 75%는 사용할 의사가 있는 것으로 나타났으나 나머지는 아무리 좋은 품질이라 해도 육수는 직접 제조하겠다고 응답하였다. 60대 이상의 응답자들만은 상품화된 육수를 사용하지 않겠다는 비율이 더 높아 60대 이상의 고령층은 상품화된 육수 제품에 대해 가장 거부감이 큰 연령대인 것으로 판단된다. 본 연구 결과, 상품화된 육수의 수요는 크나 시판되는 제품들에 대한 만족도는 낮은 것으로 나타났으므로 소비자 요구를 반영한 육수 제품에 대한 연구가 시급한 것으로 생각된다.

Key words : 상품화된 육수, 이용 현황, 소비자 의견

I. Introduction

In Korea, as the old saying goes, "The spoon must be wet, the rice must accompany soup¹⁾", leading to the development of a cooking style where soup makes up a vital component of the total diet. Soup is a boiled soup dish²⁾ made from various kinds of animal and

fowl, fish and shellfish, vegetables, and seaweed. Based on the fact that the soups made from meat had been shown frequently in the ancient literature³⁾, it is well known that Korean people preferred meat-based soup from past to present. As the consumption of meat has been increasing continuously in modern days, utilization of meat soup made from animal and fowl is

also expected to increase highly. Researcher for Korean cuisine and food preparation methods⁴⁾ and Kwon⁵⁾ said that Koreans consume large quantities of soups such as Kalbi-tang, Yukkae-jang and Kom-tang.

As the lifestyle of Korean changed to quick paced and demand for quick, convenient, the meat soup consumed large quantity have been commercialized into consolidated seasonings and sauces, which are now actively being marketed. The combined seasoning manufactured by mixing together animal and plant materials and spices, sodium glutamate, and salt was first developed in 1970's and posted a remarkable growth of more than 30% during the mid-90's. In 1999, production reached 35,083 tons, and the combined seasoning market has entered a period of maturity⁶⁾. However, there is not enough research being performed on the status of utilization of commercial soup stock and consumer opinion regarding a product of this market size.

Hence, this paper surveyed the status of utilization and consumers' opinions for commercial soup stock in order to develop meat soup capable of satisfying consumer requirements.

II. Materials and Methods

1. Objects of research and methods

This research has been conducted on housewives living in Seoul. They were requested to personally complete a comprehensive questionnaire. Based on the results of preliminary surveys conducted on 20 housewives, the questionnaire was edited and supplemented to enhance the survey's accuracy. For one month from February 15, 1997 to March 15, 1997, housewives in churches and alumni meetings were surveyed. A total of 500 questionnaires were prepared and 488 were completed and accepted for analysis. Twelve respondent's questionnaires were excluded due to intentional attempts to undermine the validity of the study.

2. Survey details

This research surveyed the demographic

characteristics of the respondents and general information regarding their views on food. In another words, we determined the age, number of continuous marriage years, education levels, number of family members, monthly average income, monthly average food expenses (including eating out cost), origin of cooking methods, and channel of cooking information. Next, the utilization status of the commercial soup stock, acceptance and consumers' opinions regarding the products were surveyed.

3. Statistical analysis

All questions sought frequency and percentages, and a Chi-square test was conducted to validate the relationships between the general matters and the consumers' opinions regarding the commercial soup stock. The statistical process used SAS program⁷⁾.

III. Results and Discussion

1. Status of utilization of the commercial soup stock

Table 1 shows the demographic characteristics of the respondents, while Table 2 reveals the survey data obtained on the origin of each respondent's cooking methods and the channel of cooking information. The results of surveys (Table 3) conducted on the status of utilization for the commercial soup stock and similar product showed the highest utilization rate (67%) for powder type products. The most common reason is that such products save time and are convenient (64%). As shown on Table 3, consumers often used cooking methods that mixed the product with meat soup made from meat (50%). Thirty one percent of the respondents used the product independently. Lee et al.⁸⁾ reported a high frequency of using commercial soup stock, and it is considered to be due to the convenience of the product and the auxiliary roles of the meat soup made from meat. The survey results indicated that 81% of the respondents said they did not like the commercial soup stock due to worries related to additives (preservatives, coloring, etc.) (59%) and artificial seasonings (58%) (Table 4). As for the evaluation of taste, only 4% said 'they liked it',

<Table 1> Demographic characteristics on consumers participated in this study

Item	Classification	Number	(%)
Age(year)	less than 30	28	5.7
	30~40	140	28.7
	40~50	203	41.6
	50~60	94	19.3
	more than 60	23	4.7
Number of continuous marriage (year)	1~10	71	14.5
	11~20	206	42.2
	21~30	154	31.6
	more than 30	57	11.7
Education level	elementary	13	2.7
	middle school	42	8.6
	high school	226	46.3
	college	207	42.4
Monthly family income (10,000won)	less than 100	28	5.7
	100~200	166	34.0
	200~300	170	34.9
	more than 300	124	25.4
Monthly food expenses (10,000won)	less than 20	60	12.3
	20~40	163	33.4
	40~60	170	34.8
	more than 60	95	19.5
Monthly eating out cost (10,000won)	less than 10	262	53.7
	10~20	160	32.8
	20~30	44	9.0
	more than 30	22	4.5
Family size	less than 5	333	68.2
	5 and over	155	31.8
Total		488	100

Total respondents = 488 person

indicating that many of the consumers do not prefer the taste of commercial soup stock and similar products. Considering such low levels of consumer satisfaction despite the high frequency of using the commercial soup stock ⁸⁾, it is considered that the quality of the product does not satisfy consumers compared with the demand. Even though 75% indicated their intention to use the commercial soup stock if the quality could be guaranteed, 25% said they would make the meat soup themselves regardless of the quality of the commercial products. Accordingly, it is believed necessary to attempt to eliminate worries related to additives on the part of consumers when

<Table 2> Origin of the cooking methods currently using and channel of the information on cooking

Item	Classification	Number	Ratio(%)
Origin of the cooking methods	Seoul, Kyunggi-do	198	40.6
	Cholla-do	115	23.5
	Kyongsang-do	68	13.9
	Chungchong-do	58	11.9
	No answer	23	4.7
	Northern Korea	14	2.9
	Kangwon-do	12	2.5
	Cheju-do	0	0
	Abroad/foreign	0	0
Total		488	100
Channel of the information on cooking	Family, relatives & neighbors	380	77.9
	Mass-media	68	13.9
	Cook book, specialist	40	8.2
Total		488	100

<Table 3> Informations on the use of commercial soup stock

Item	Classification	Number	Ratio(%) ¹⁾
Types of product*	Powdered seasoning	326	66.8
	Condensed solution	50	10.2
	Bouillon cube	4	0.8
	Others	1	0.2
	Never used	107	22.0
Total		488	100
Reasons for use**	for saving time & convenience	310	63.5
	for good taste	53	10.9
	for reasonable price	7	1.4
	others	11	2.3
Ways to use**	use by itself	151	30.9
	use with meat soup	246	50.4
	never used	107	22.0

* Question selecting only one

** Multi choice question

¹⁾ The ratio out of total respondents (N=448)

marketing meat soups and develop products using natural materials.

2. Consumers' opinions regarding the commercial soup stock

The demographic characteristics of those respondents who accepted the commercial soup stock

<Table 4> Consumer's opinions on commercial soup stock

Item	Classification	Number	Ratio(%) ¹⁾
Acceptance*	Like	95	19.5
	Don't like	393	80.5
Total		488	100
Reason of dislike**	Additives(antiseptic, pigment)	286	58.6
	Artificial seasoning	285	58.4
	Sanitation	94	19.3
	Taste	41	8.4
Evaluation of taste*	Good	21	4.3
	So so	392	80.4
	Bad	45	9.2
	Never eaten	30	6.1
Total		488	100
Intend to use guaranteed product*	Yes	368	75.4
	No	120	24.6
Total		488	100

* Question selecting only one

** Multichoice question

¹⁾ The ratio out of total respondents (N=448)

was investigated. The results indicated a statistically significant relationship with age, number of continuous marriage years, and educational levels (Table 5). There was no particular difference in acceptance between respondents in the 20's and 30's age groups; however, in the case of the 30's and older groups, consumers expressed negative opinions of commercial soup stock and the degree of negativity increased with age (Table 5). No one in the age 60 or higher groups liked the commercial soup stock. The number of continuous marriage years reflects the degree of experience as a housewife. Survey results for number of continuous years of marriage and age were consistent in revealing a dislike for commercial soup stock. Educational level of the respondents did not show specific trends, however, the primary school graduates or lower educational levels revealed the least preference for commercial soup stock. This study showed the acceptance for commercial soup stock did not have any significant correlation with the

<Table 5> Acceptance for commercial soup stock by demographic characteristics

Unit: Number(%)

		like	don't like	Total
Age (year)	less than 30	7(25.0)	21(75.0)	28(100.0)
	30 - 40	36(25.7)	104(74.3)	140(100.0)
	40 - 50	42(20.7)	161(79.3)	203(100.0)
	50 - 60	10(10.6)	84(89.4)	94(100.0)
	more than 60	0(0.0)	23(100.0)	23(100.0)
	Total	95(19.5)	393(80.5)	488(100.0)
$\chi^2 = 14.46^{**}$				
Number of continuous marriage (year)	1 - 10	20(28.2)	51(13.0)	71(100.0)
	11 - 20	53(25.7)	153(38.9)	206(100.0)
	21 - 30	19(12.3)	135(34.4)	154(100.0)
	more than 30	3(5.3)	54(13.7)	57(100.0)
	Total	95(19.5)	393(80.5)	488(100.0)
$\chi^2 = 20.91^{***}$				
Education level	elementary	1(7.7)	12(92.3)	13(100.0)
	middle school	6(14.3)	36(85.7)	42(100.0)
	high school	56(24.8)	170(75.2)	226(100.0)
	college	32(15.5)	175(84.5)	207(100.0)
	Total	95(19.5)	393(80.5)	488(100.0)
$\chi^2 = 8.06^*$				
Family size	less than 5	68(20.4)	265(79.6)	333(100.0)
	5 and over	27(17.4)	128(82.6)	155(100.0)
	Total	95(19.5)	393(80.5)	488(100.0)
$\chi^2 = 4.281$				

<Table 5> continued

Unit: Number(%)

		like	don't like	Total
Monthly family income (10,000won)	less than 100	7(25.0)	21(75.0)	28(100.0)
	100 - 200	27(16.3)	139(83.7)	166(100.0)
	200 - 300	36(21.2)	134(78.8)	170(100.0)
	more than 300	25(20.2)	99(79.8)	124(100.0)
	Total	95(19.5)	393(80.5)	488(100.0)
$\chi^2 = 1.987$				
Monthly food expenses (10,000won)	less than 20	11(18.3)	49(81.7)	60(100.0)
	20 - 40	38(23.3)	125(76.7)	163(100.0)
	40 - 60	34(20.0)	136(80.0)	170(100.0)
	more than 60	12(12.6)	83(87.4)	95(100.0)
	Total	95(19.5)	393(80.5)	488(100.0)
$\chi^2 = 4.449$				
Monthly eating out cost (10,000won)	less than 10	57(21.8)	205(78.2)	262(100.0)
	10 - 20	30(18.8)	130(81.3)	160(100.0)
	20 - 30	5(11.4)	39(88.6)	44(100.0)
	more than 30	3(13.6)	19(86.4)	22(100.0)
	Total	95(19.5)	393(80.5)	488(100.0)
$\chi^2 = 3.248$				
Origin of the cooking methods	Seoul, Kunggi-do	41(20.7)	157(79.3)	198(100.0)
	Cholla-do	25(21.7)	90(78.3)	115(100.0)
	Kyongsang-do	10(14.7)	58(85.3)	68(100.0)
	Chungchong-do	10(17.2)	48(82.8)	58(100.0)
	Northern Korea	1(7.1)	13(92.9)	14(100.0)
	Kangwon-do	2(16.7)	10(83.0)	12(100.0)
	No answer	6(26.1)	17(73.9)	23(100.0)
Total	95(19.5)	393(80.5)	488(100.0)	
$\chi^2 = 3.799$				
Channel of the information on cooking	Family, relatives & neighbors	8(11.8)	60(88.2)	68(100.0)
	Mass-media	81(21.3)	299(78.7)	380(100.0)
	Cook book, specialist	6(15.0)	34(85.0)	40(100.0)
	Total	95(19.5)	393(80.5)	488(100.0)
$\chi^2 = 3.911$				

Acceptance for commercial soup stock is significantly different by demographic characteristics (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$).

respondent's economic environment, such as the monthly average income and food expenses. Lee et al.⁸⁾ also reported it was not statistically significant that the correlation of the frequency of using these products with the respondent's economic environment.

The research indicated that there was a high correlation between intention to use the commercial soup stock material and respondent's age (Table 6). Except for the 60's group, a higher percentage of respondents intended to use the products if the quality

could be guaranteed than those who expressed no intention to use the product regardless of the quality. Sales projections for these products are considered bright if the quality of the soup stock can be improved. Meanwhile, the 60's and older groups who expressed no intention to use the products even if the quality is guaranteed are considered to be the consumers who will be least likely to respond to marketing of soup stock products.

<Table 6> Intend to use for guaranteed commercial soup stock by demographic characteristics

Unit: Number(%)

		Yes	No	Total
Age(year)	less than 30	20(71.4)	8(28.6)	28(100.0)
	30 - 40	107(76.4)	33(23.6)	140(100.0)
	40 - 50	154(75.9)	49(24.1)	203(100.0)
	50 - 60	79(84.0)	15(16.0)	94(100.0)
	more than 60	8(34.8)	15(65.2)	23(100.0)
	Total	368(75.4)	120(24.6)	488(100.0)
$\chi^2 = 24.59^{***}$				
Number of continuous marriage (year)	1 - 10	54(76.1)	17(23.9)	71(100.0)
	11 - 20	161(78.2)	45(21.8)	206(100.0)
	21 - 30	113(73.4)	41(26.6)	154(100.0)
	more than 30	40(70.2)	17(29.8)	57(100.0)
	Total	368(75.4)	120(24.6)	488(100.0)
$\chi^2 = 2.039$				
Education level	elementary	8(61.5)	5(38.5)	13(100.0)
	middle school	35(83.3)	7(16.7)	42(100.0)
	high school	170(75.2)	56(24.8)	226(100.0)
	college	155(74.9)	52(25.1)	207(100.0)
	Total	368(75.4)	120(24.6)	488(100.0)
$\chi^2 = 2.807$				
Family size	less than 5	257(77.2)	76(22.8)	333(100.0)
	5 and over	111(71.6)	44(28.4)	155(100.0)
	Total	368(75.4)	120(24.6)	488(100.0)
$\chi^2 = 1.766$				
Monthly family income (10,000won)	less than 100	22(78.6)	6(21.4)	28(100.0)
	100 - 200	118(71.1)	48(28.9)	166(100.0)
	200 - 300	133(78.2)	37(21.8)	170(100.0)
	more than 300	95(76.6)	29(23.4)	124(100.0)
	Total	368(75.4)	120(24.6)	488(100.0)
$\chi^2 = 2.655$				
Monthly food expenses (10,000won)	less than 20	45(75.0)	15(25.0)	60(100.0)
	20 - 40	127(77.9)	36(22.1)	163(100.0)
	40 - 60	131(77.1)	39(22.9)	170(100.0)
	more than 60	65(68.4)	30(31.6)	95(100.0)
	Total	368(75.4)	120(24.6)	488(100.0)
$\chi^2 = 3.308$				
Monthly eating out cost (10,000won)	less than 10	203(77.5)	59(22.5)	262(100.0)
	10 - 20	122(76.3)	38(23.7)	160(100.0)
	20 - 30	27(61.4)	17(38.6)	44(100.0)
	more than 30	16(72.7)	6(27.3)	22(100.0)
	Total	368(75.4)	120(24.6)	488(100.0)
$\chi^2 = 5.434$				
Origin of the cooking methods	Seoul, Kunggi-do	155(78.3)	43(21.7)	198(100.0)
	Cholla-do	84(73.0)	31(17.0)	115(100.0)
	Kyongsang-do	51(75.0)	17(25.0)	68(100.0)
	Chungchong-do	39(67.2)	19(32.8)	58(100.0)

<Table 6> continued

Unit: Number(%)

		Yes	No	Total
Origin of the cooking methods	Northern Korea	10(71.4)	4(28.6)	14(100.0)
	Kangwon-do	10(83.3)	2(16.7)	12(100.0)
	No answer	19(82.6)	4(17.4)	23(100.0)
Total		368(75.4)	120(24.6)	488(100.0)
		$\chi^2 = 4.490$		
Channel of the information on cooking	Family, relatives & neighbors	284(74.7)	96(25.3)	68(100.0)
	Mass-media	52(76.5)	16(23.5)	380(100.0)
	Cook book, specialist	32(80.0)	8(20.0)	40(100.0)
Total		368(75.4)	120(24.6)	488(100.0)
		$\chi^2 = 0.589$		

Intend to use for guaranteed commercial soup stock is significantly different by demographic characteristics (*** $p < 0.001$).

IV. Summary and Conclusions

The results of research made into the status of utilization and consumers' opinions for the commercial soup stock are as follows:

1. Of the female age groups surveyed, groups in their 30's and 40's made up the largest percentage (70%), and 85% of the total respondents were housewives who had been married for a period of 10 years or longer. Monthly average household earnings of one to three million won accounted for 70% of the total respondents, and the highest number of housewives (41%) used cooking methods prevailing in Seoul and Kyonggi area. The main source of information on the art of cooking was families, friends and neighbors (78%).

2. The results of surveying utilization status of the commercial soup stock revealed that powder-type products were most commonly used (67%) because they reduced food preparation time and were more convenient (64%). The most common method of utilization of soup stock was where it was mixed with meat soup made from beef.

3. Eighty one percent of the respondents replied that they did not like the commercial soup stock. They said they did not like the products due to worries related to additives such as preservatives, coloring, etc. (59%) and artificial seasonings (58%). Higher age groups and longer continuous years of marriage groups tended to express the highest degree of rejection of commercial

soup stock.

4. Approximately 4% of the respondents said good when questioned regarding the taste of the commercial soup stock, indicating a low number of consumers prefer the taste of the commercial soup stock currently being marketed.

5. While 75% showed interest in using the product if the quality of the commercial soup stock is guaranteed, 25% said that they would make meat stock by themselves regardless of the quality of the commercial products. A higher rate of rejection of commercial soup stock was found in the 60's or older groups.

In conclusion, it is considered that the quality of commercial soup stock does not satisfy consumers compared with the big demand. A further research to develop the commercial soup stock of superior quality is needed.

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