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A STUDY ON THE DEMAND AND MARKET DEVELOPMENT
OF
LOW COST NUTRITIOUS BREAD IN KOREA

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Research Institute
for Economics and Business
Sogang University
Seoul, Korea

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Table of Contents

Introduction	1
Background of the Study	1
Developing Soy-fortified Bread by Sam Lip Foods Co., Ltd.	1
Objectives of the Study	3
Sources of Data	4
Organization of the Report	5
Chapter I : Pattern of Food Consumption	7
Introduction	7
1. Trends in Food Consumption	7
1-1. Trend in Consumption of Food-grains Meats and Others from Time-series Food Balance Data	7
1-2. Trend in Consumption of Processed Foods from Cross-section (household survey) Data	11
2. Income and Price Elasticities of Major Food Items	16
3. Aggregate Demand Projection	23

Chapter II : Summary of Findings from Bread

Market Surveys	31
1. Bread Consumer Behavior in Seoul	31
1-1. ASI Consumer Survey	31
1-2. Summary of the Findings	32
1-3. Comments on ASI Survey	39
2. The Design of the Bread Consumer Surveys in the Test Markets	41
2-1. Specific Objectives of the Surveys	41
2-2. The Test Market Selected	42
2-3. The Sample Store Selected	44
2-4. Nature of the Surveys Conducted	45
3. Survey Findings of Bread Consumer Behavior ..	46
3-1. Demographic Characteristics of Bread Users	46
3-2. Bread Consumption Habit	56
3-3. Bread Buying Habit	64
3-4. Consumer Responses upon the Soy-fortified Bread	67
3-5. Source of Information on the Soy-fortified Bread	80
3-6. Comments on the Survey Findings	85

Chapter III. Sales Analysis of Bread and the Soy-fortified Bread	88
1. The Soy-fortified Bread Sales during the Test Market Period (July and August 1976)	88
1-1. Decisions Concerning Test Marketing	88
1-2. Bread Sales during the Test Period	103
1-3. Comments on the Test Marketing of the Soy-fortified Bread	121
2. The Soy-fortified Bread Sales during Market- wide Distribution (November, 1976 to June, 1977)	123
2-1. Marketing Decisions Concerning Market-wide Distribution	123
2-2. Bread Sales during the Market-wide Distribution	131
2-3. Comments on the Market Introduction of the Soy-fortified Bread	160
Chapter IV. Summary and Conclusions	169
Summary of the Study	169
Conclusions	178

LIST OF TABLES

<u>Table</u>	<u>Page</u>
I-1. Trend in per Capita Food Consumption per Diem (1962-1975)	9
I-2. Annual Aggregate Consumption of Foods	10
I-3. The Share of Foods Expenditure in Total Household Budget (All Cities, Monthly Average)	13
I-4. Urban Household Expenditure on Food Items ..	14
I-5. Urban Household Expenditure on Processed Foods	15
I-6. Expenditure on Processed Food by Income Classes	17
I-7. Expenditure on Processed Food in Rural Households (1964-1974)	19
I-8. Income and Own Price Elasticities of Food Items	22
I-9. Price and Expenditure Elasticities of Expenditure for Food of Urban Household Members, Annual Data	24
I-10. Food Demand Projection (1976-1981)	27
I-11. Supply and Disappearance of 14 Food Commodity Groups and 3 Industrial Crop Groups in Korea (1975, '80, '85)	28
I-12. Average Daily Calorie Intake of Grains and Animal Products by Farm and Nonfarm Residents, 1965-74 and Target	30

<u>Table</u>	<u>Page</u>
II-1. Characteristics of Bread Users	33
II-2. Main Bread Users in the Family	34
II-3. Length of Time Bread Eaten	35
II-4. Weekly Bread Consumption Volume	37
II-5. Seasonality in Eating Bread	37
II-6. Eating Pastries at Least Several Times a Week	38
II-7. Reasons for Not Eating Bread	38
II-8. Persons Disliking Bread	40
II-9. The Dealers Selected and the Price Assigned	43
II-10. Sample Store Characteristics	44
II-11. Number of Samples Interviewed	46
II-12. Number of Respondents by Price Level	48
II-13. Family Size of the Respondents	49
II-14. Occupation of the Respondents	51
II-15. Monthly Income of Householder	53
II-16. Occupation and Monthly Income of Householder	54
II-17. Size of Residence by Monthly Income of Householder	55
II-18. Weekly Bread Consumption	57
II-19. Weekly Bread Consumption by Family Size ...	59
II-20. Frequency of Taking Bread as a Meal and as a Snack	61

<u>Table</u>	<u>Page</u>
II-21. Bread Consumption Habit (as a Meal) by Family Size	62
II-22. Relationships of Bread Habits as a Meal and as a Snack	63
II-23. Bread Eating Habit (as a Meal) by Occupa- tion of the Householders	65
II-24. Major Purchaser of Bread in Family	66
II-25. Reasons for Buying a Certain Brand of Bread	68
II-26. Priority in Purchasing Bread by Price Level	69
II-27. Opinion on the Price of the Soy-fortified Bread by Price Level	71
II-28. Opinion on the Respondents on the Feature of the Soy-fortified Bread by Price Level	72
II-29. Opinion on the Features of the Soy- fortified Bread (In Reference to Regular and Milk Bread)	74
II-30. Attitude on the Quality of the Soy- fortified Bread (In Comparison with Regular and Milk Bread)	75
II-31. Opinion on the Further Purchasing Intention of the Soy-fortified Bread by Price Level	77
II-32. Buying Experience of the Soy-fortified Bread by Price Level	78
II-33. Reasons for Discontinuation of Buying the Soy-fortified Bread by Price Level ...	79

<u>Table</u>	<u>Page</u>
II-34. Reasons for Discontinuation of Repurchasing Soy-fortified Bread	81
II-35. Source of Information about the Soy- fortified Bread by Dealer Area	83
II-36. Source of Information about the Soy- fortified Bread by Area	84
III-1. Number of Selected Stores for the Test Sales of the Soy-fortified Bread by Territory	89
III-2. Bread Prices and Marketing Spreads (Effective during the Test Period)	91
III-3. Summary of the Poster Messages	99
III-4. Analysis of Bread Sales by Selected Test Area (During July 8-31)	106
III-5. Analysis of Bread Sales by Selected Test Area (During August 1-27)	107
III-6. Analysis of Bread Sales by Area at Selected Neighborhood Retail Store (During July 8-31)	111
III-7. Analysis of Bread Sales by Area at Selected Neighborhood Retail Store (During August 1-27)	112
III-8. Analysis of Bread Sales by Area at Selected Supermarket (During July 8-31)	113
III-9. Analysis of Bread Sales by Area at Selected Supermarket (During August 1-27)	114
III-10. Bread Sales per Store-day by Area (During July 8-31)	116

<u>Table</u>	<u>Page</u>
III-11. Bread Sales per Store-day by Area (During August 1-27)	117
III-12. Bread Sales Ratios by Area (During July 8-31)	119
III-13. Bread Sales Ratios by Area (During August 1-27)	120
III-14. Bread Prices and Marketing Spreads (Effective after Jan. 17, 1977)	126
III-15. Radio Advertise Message	128
III-16. Radio Advertisement for the Soy-fortified Bread	130
III-17. Monthly Bread Sales of Sam Lip	132
III-18. Monthly Bread Sales Ratios of Sam Lip	134
III-19. Analysis of Bread Sales and Sales per Store-day by Area at Selected Neighborhood Retail Stores (During Dec. 1-31, 1976)	136
III-20. Analysis of Bread Sales and Sales per Store-day by Area at Selected Neighborhood Retail Stores (During Jan. 1-31, 1977)	137
III-21. Analysis of Bread Sales and Sales per Store-day by Area at Selected Neighborhood Retail Stores (During Feb. 1-28, 1977)	138
III-22. The Proportion of the Soy-fortified Bread Sales to the Total Bread Sales by Area at Selected Neighborhood Retail Stores	141
III-23. The Soy-fortified Bread Sales per Store-day by Area at Selected Neighborhood Retail Stores	143

<u>Table</u>	<u>Page</u>
III-24. Analysis of Bread Sales and Sales per Store-day by Area at Selected Supermarkets (During Dec. 1-31, 1976)	145
III-25. Analysis of Bread Sales and Sales per Store-day by Area at Selected Supermarkets (During Jan. 1-31, 1977)	146
III-26. Analysis of Bread Sales and Sales per Store-day by Area at Selected Supermarkets (During Feb. 1-28, 1977)	147
III-27. Proportion of Soy-fortified Bread Sales to Total Bread Sales at Selected Neighborhood Retail Stores in Selected Areas	151
III-28. The Number of Sam Lip Customers in the Selected Areas	154
III-29. Analysis of Bread Sales by Selected Area (During Dec. 1, 1976-Feb. 28, 1977)	156
III-30. Analysis of Bread Sales by Selected Area (During Mar. 1, 1977-May 31, 1977)	157
III-31. Analysis of Bread Sales by Selected Area (During Jun. 1-30, 1977)	158
III-32. Bread Sales per Store-day by Area (During Dec. 1, 1976-Feb. 28, 1977)	161
III-33. Bread Sales per Store-day by Area (During Mar. 1, 1977-May 31, 1977)	162
III-34. Bread Sales per Store-day by Area (During Jun. 1-30, 1977)	163

List of Figures

<u>Figure</u>	<u>Page</u>
III-1. Package Design of the Soy-fortified Bread	93
III-2. Design of the Promotional Poster	96
III-3. Description of the Poster	98
III-4. Promotional Leaflet	100
III-5. Promotional Insert in the Bread Package ..	102

INTRODUCTION

Background of the Study

Under the joint sponsorship by the Agency for International Development (USAID) and the United States Department of Agriculture (USDA), Korean Foods Industry Association (KFIA) undertook the project for developing low-cost nutritious foods. In 1975, KFIA undertook a set of programs to encourage major Korean food manufacturing companies to develop and market low-cost high protein foods in Korean. Under these programs, Sam Lip Foods Company Ltd. was assigned to develop, and introduce low-cost high nutritious (soy-fortified) bread to Korean food market.

In addition, USAID commissioned a separate research program for developing an effective marketing program and for evaluating the performance of marketing the soy-fortified bread. The study was undertaken by a group of researchers headed by Professor Il-Chung Whang, Research Institute for Economics and Business, Sogang University in Seoul, Korea.

Developing Soy-fortified Bread by
Sam Lip Foods Co., Ltd.

Under an USAID financial sponsorship, Sam Lip Foods Co., Ltd. began developing soy-fortified bread in early 1975. The development of soy-fortified bread together with the test of

its manufacturing process was nearly completed by March, 1975. A series of product-taste tests were conducted in order to gather consumer responses to the taste of the new product. On the basis of the consumer responses obtained from the tests, efforts were made to improve the product. Except for minor complaints about the texture and flavor of the soy-fortified bread, the consumer responses were largely favorable.

In February, 1975, the Korean government prohibited the import of strong flour (dark northern spring wheat-DNS) which has higher protein content in an effort to save foreign exchanges.¹⁾ The DNS wheat is indispensable in producing the right kind of soy-fortified bread. The company, therefore, decided to postpone the marketing of the soy-fortified bread with a hope that the import prohibition of DNS wheat would be lifted in near future.

The company, nevertheless, undertook to improve, manufacturing process for the new bread and carried out a series of experiments to produce new bread with other wheat than DNS wheat. The technical problems involved in these experiments further delayed in manufacturing the soy-fortified bread for market introduction.

¹⁾ The foreign exchange reserve position of the Republic of Korea was at its lowest position in Spring, 1975.

During the latter half of 1975 the company conducted another set of trial runs on the production of the soy-fortified bread by mixing weak flour with S.S.L. and gluten in addition to soy flour. The company succeeded in producing the new bread that had somewhat less unpleasant soy flavor. The company felt that it was not ready to introduce the improved bread to market testing. No further action was taken by the company until Spring, 1976.

In Spring, 1976, it was known that strong flour would be available sometime in May. The government finally realized that strong flour was indispensable in producing good-quality bread and pastries and that the saving from the import prohibition of strong flour was nearly offset by the costs of importing additives, such as gluten, and by the poor nutritional value of weak flour.

Such new government decision to allow import of DNS wheat enabled the Sam Lip Foods Co. to resume the manufacturing and test marketing of the soy-fortified bread from June, 1976. It was only then possible for our research team to initiate a series of market studies.

Objectives of the Study

Our study is focused on the analysis and evaluation of findings from consumer attitudes and marketing surveys for soy-fortified bread in the Korean test market. In the past

no comprehensive marketing studies have been made about bread consumption. Moreover, these studies are largely limited to finding consumer attitudes toward a specific brand of bread, or towards bakery products, particularly on pastries. The findings from such studies had limited values for our purpose.

The following are the objective of our research project.

1. To analyze bread consumption pattern and its existing marketing conditions in Korea,
2. To provide useful market data on consumer responses toward bread of ordinary kind,
3. To analyze and evaluate the actual marketing performance of the soy-fortified bread both in test markets and market-wide distribution channels, and,
4. To evaluate the feasibility of marketing the soy-fortified bread in Korean markets.

Sources of Data

The following three kinds of data were employed in our study.

1. Secondary sources from food balance sheets (time-series) and household surveys were utilized to provide background information on pattern and future need of foods in general and processed foods in particular.

2. In order to collect first-hand information on the consumer attitudes towards both ordinary bread and the soy-fortified bread, field surveys have been conducted at both retail stores and consumer's residence. Mail surveys were also made to supplement findings from field surveys.
3. Because of insufficient and unreliable data available for the bread sales in Seoul and countryside, only the data provided by Sam Lip Foods Co., Ltd. and the sales data provided by the selected sample dealers of the company were utilized in our study.

Organization of the Report

Chapter I provides the past pattern and future need of consumption of foods in general and processed foods in particular to provide background information in evaluating the market potentials for the soy-fortified bread. Chapter II presents the summary of the finding from bread market surveys conducted at both retail stores and consumer's residence. Also, for the better understanding of Korean urban bread market the chapter includes the summary of the bread user survey, which was conducted by ASI Market Research Inc. (Korea). Chapter III deals with the evaluation of introductory marketing programs and market position of the soy-fortified bread

during the first seven months of the market-wide introduction (December 1976 to June 1977). The chapter is also concerned with some qualitative comments on the promotion of soy-fortified bread that was conducted by Sam Lip Foods Co., Ltd. during the introductory stage of the market-wide distribution. The summary and the conclusions of our study is presented in the end (Chapter IV).

CHAPTER I

PATTERN OF FOOD CONSUMPTION

Introduction

The purpose of this chapter is (1) to characterize trends in consumption of food including grains, potatoes, fruits, vegetables, meats, dairy products, and processed foods from the review of relevant statistical data and previous studies of food demand relationships in Korea, (2) to present income and price elasticities of demand for basic food items available from the previous cross-sections and time-series studies of food demand relationships, and (3) to present the long-term projection of per-capita demand for food grains and other major food items on the basis of the best estimates available.

1. Trends in Food Consumption

1-1. Trend in Consumption of Food-grains Meats and Others from Time-series Food Balance Data

For this study consumption is defined as that quantity of a food grouping which is made available for domestic consumption from production, net imports and stocks. The figures of per capita consumption of the various food grouping for the period from 1962 to 1975 is presented in Table I-1.

Total consumption figures from food balance data were then divided in each year by the corresponding population. Table I-2 presents the aggregate domestic consumption of major food groupings for the period from 1970 to 1975.

Consumption of Food-grains : Foodgrains consumed in Korea are grouped into rice, wheat flour, barley, and other grains. From Table I-1, the per capita consumption of all foodgrains for the period from 1962 to 1975 shows an increasing trend up to 1968 and then maintained a somewhat constant level of 522-550 grams with the exception of the peak level of 582.2 grams (per person) in 1971. The annual per capita consumption, however, fluctuated widely over the period for 1962 to 1975. This was mainly caused by wide fluctuations in the consumption of rice which accounted for about 70 per cent in 1962 and 62 per cent in 1975 of the consumption of all foodgrains. The per capita consumption of wheat flour rapidly increased from 34 grams in 1962 to the peak of 100.1 grams in 1973 and then declined to 82.4 grams in 1975. The per capita consumption of barley and other grains shows a relatively constant trend over the period, with somewhat mild annual fluctuations.

Pulses, Vegetables and Fruits : The per capita consumption of pulses shows a steady increase from 16.3 grams in 1962 to 17.2 grams in 1971 and to 22.6 grams in 1975. The per capita consumption of vegetables and fruits shows a steadily increasing trend over the entire period.

Table I-1. Trend in per Capita Food Consumption per Diem (1962-1975)

Year Item	(Unit:g)					
	1962	1965	1968	1971	1973	1975
Grains	477.6	504.3	526.5	582.2	551.1	528.6
Rice	331.4	354.5	322.7	382.2	330.5	328.3
Wheat flour	34.0	36.9	76.1	87.6	100.1	82.4
Barley	104.3	105.1	117.1	106.1	112.3	108.6
Others	7.9	7.9	10.7	6.3	8.2	9.2
Potatoes	98.1	200.5	147.6	136.5	107.5	115.2
Sugar	4.7	3.5	12.0	19.0	15.9	14.3
Pulses	16.3	14.5	17.6	17.2	19.3	22.6
Nuts	0.2	0.2	0.2	0.2	0.2	0.5
Oil seeds	0.2	0.8	0.2	0.1	0.8	3.5
Vegetables	99.0	115.1	146.3	184.9	161.0	171.3
Fruits	15.1	22.3	24.4	27.1	34.2	38.2
Meats	12.9	15.9	22.2	21.6	25.3	25.4
Eggs	4.4	5.1	5.6	8.8	9.1	10.9
Milk	0.4	5.6	3.8	6.0	8.9	8.8
Shell Fish	36.9	44.8	38.1	40.6	64.1	67.6
Seaweed	3.3	3.9	7.2	7.5	14.6	14.4
Oils	0.8	1.0	3.4	6.1	5.6	7.3

Source: Ministry of Agriculture, Forestry and Fishery and FAO Korea Association, Food Balance Sheet, 1975.

Table I-2 Annual Aggregate Consumption of Foods

(unit:1,000M/T)

Year	1970	1971	1972	1973	1974	1975
foods						
Grains	6,302	7,008	6,777	6,870	6,894	6,808
Potatoes	1,810	1,641	1,469	1,340	1,034	1,256
Sugars	201	228	203	199	200	184
Pulses	239	221	205	240	241	291
Nuts	2	2	3	3	4	7
Oil Seeds	3	2	8	10	12	45
Vegetables	1,938	2,224	2,090	2,007	2,263	2,206
Fruits	325	325	380	426	451	492
Meats	268	260	309	317	319	326
Eggs	103	106	117	114	134	139
Milk	(56)	(73)	(84)	(109)	(128)	(113)
Shell fish	474	489	629	801	690	856
Seaweed	85	90	84	181	273	185
Oils	47	73	67	70	77	94
Alcoholic beverages	1,485	1,631	1,875	2,004	2,092	2,049

Source: Ministry of Agriculture, Forestry and Fishery, and
FAO Korea Association, Food Balance Sheet, 1975

Animal Protein Food : The per capita consumption of animal protein foodstuffs increased rapidly over the entire period. The per capita consumption of meats including beef, pork and chicken steadily increased from 12.9 grams in 1962 to 25.4 grams in 1975. The per capita consumption of eggs shows a sharp increase from 4.4 grams in 1962 to 10.9 grams in 1975. The per capita consumption of milk increased from 0.4 grams in 1962 to 8.8 grams in 1975, showing a twenty-two-fold increase over the fourteen-year period. The per capita consumption of fish and shell fish increased from 36.9 grams in 1962 to 67.6 grams in 1975.

1-2. Trend in Consumption of Processed Foods from Cross-section (Household survey) Data

Data on household expenditures on "processed foods" are collected mainly from annual reports on the family income and expenditure survey in urban areas which were available from 1962 to 1974. The detailed coverage of "processed foods" is shown in the first column of Table I-5. The items listed in this table are grouped into prepared food, confectioneries, and soft drinks.

Engel Coefficient : Table I-3 shows trends in monthly food expenditure and its share in monthly total expenditures in urban households for the period from 1963 to 1974. As per capita real income grew (see Table A. I-1 in Appendix), the

share of food expenditure in total family budgets (Engel coefficient) decreased steadily from 59.5 per cent in 1964 to 40.7 per cent in 1972. It increased to 43.3 per cent in 1974, reflecting a sharp rise in the relative prices of foods.

Relative Share of Processed Foods : As presented Table I-4, the share of the processed foods (consisting of prepared foods, confectioneries and soft drinks) in total food expenditures for urban households rapidly increased from 2.9 per cent in 1965 to 8.2 per cent in 1975. Whereas real total household expenditure per month increased 1.8 times and food expenditure 1.2 times, respectively, over the period between 1965 and 1975, expenditure on processed foods increased 4.4 time over the same period. This shows that the demand for processed foods grew faster than the growth of both family income and food expenditures.

Expenditure on plain bread occupied a very negligible portion of 0.2 per cent in food expenditure through the period from 1971 to 1975. The share of sweetened bread in food expenditure remained 0.7 per cent over the same period. In other words, the growth of demand for both plain and sweetened bread which together occupied 0.9 per cent in food expenditure kept in line with the growth of food expenditure. Expenditures on individual items of processed foods over the period from 1968 to 1974 are presented in Table I-5.

Table I-3 The share of Food Expenditure in Total Household Budget (All Cities, Monthly Average)

(Unit : In won)

Year	Total Expenditure (A)	Food Expenditure (B)	Engel Coefficient (B/A)
1963	7,080	3,840	54.2
1964	8,620	5,130	59.5
1965	9,780	5,550	56.7
1966	13,560	6,580	48.2
1967	20,620	9,180	44.5
1968	23,190	9,840	42.4
1969	26,070	10,670	40.9
1970	29,950	12,120	40.5
1971	34,970	14,340	41.0
1972	38,560	15,710	40.7
1973	41,490	17,130	41.3
1974	50,100	21,680	43.3

Source: Economic Planning Board, Annual Reports on the Family Income and Expenditure Survey

Table I-4. Urban Household Expenditure on Food Items

At 1970 constant prices

	Unit	1965	1968	1971	1973	1975
A. Food & Beverages		10,150	13,948	12,061	12,408	12,249
B. Cereals (B/A)	(%)	5,650 (59.6)	5,996 (44.7)	4,970 (43.1)	4,825 (44.7)	4,642 (46.3)
(1) Rice (1/B)	(%)	4,721 (51.1)	5,179 (38.6)	4,428 (38.4)	4,194 (38.9)	4,188 (41.8)
(2) Barley (2/B)	(%)	736 (7.8)	494 (3.7)	372 (3.2)	386 (3.6)	222 (2.2)
(3) Wheat (3/B)	(%)	2 (0.0)	1 (0.0)	4 (0.0)	11 (0.1)	8 (0.1)
(4) Soybeans (4/B)	(%)	27 (0.3)	47 (0.4)	36 (0.3)	51 (0.5)	45 (0.5)
(5) Wheatflour (5/B)	(%)	34 (0.4)	66 (0.5)	84 (0.7)	140 (1.3)	134 (1.3)
C. Processed Food (C/A)	(%)	253 (2.9)	590 (4.8)	1,007 (7.6)	1,061 (7.7)	1,109 (8.2)
D. Bread (D/A)	(%)			25 (0.2)	27 (0.2)	25 (0.2)
E. Sweetened Bread (E/A)	(%)			92 (0.7)	91 (0.7)	94 (0.7)

Notes: Figures (%) in parentheses were derived from the ratio of values in current prices, not that of values in constant prices.

Sources: Economic Planning Board, Annual Reports on Family Income and Expenditure Survey, 1965-75.

Table I-5. Urban Household Expenditure on Processed Foods

(Unit : in won)

Item	Year						
	1968	1969	1970	1971	1972	1973	1974
Prepared food	245	270	450	538	569	674	795
Dried vermicelli			67	82	115	147	140
Instant noodles			77	103	110	121	145
Chinese noodles	16	17	19	22	21	18	33
Canned fish	10	12	8	8	8	11	8
Canned meat	1	5	2	4	3	4	2
Canned fruits	3	5	6	7	11	10	14
Bean curd	128	138	163	169	152	167	201
Pickled radishes	12	11	11	12	12	16	22
Sausage			15	19	27	34	37
Others	75	82	82	112	110	146	193
Confectioneries & soft drinks	228	340	380	545	573	643	936
Bread			17	27	28	34	45
Sweetened bread	8	145	69	99	119	113	158
Fresh cakes			8	7	9	11	16
Biscuits	11	24	22	24	18	19	25
Crackers	2	4	2	4	2	9	10
Other cakes	128	43	126	220	228	139	289
Rice cakes						59	50
Korean cakes						19	28
Chocolate			7	6	5	7	6
Taffy	3	6	4	5	6	7	11
Chewing gum	4	7	6	8	8	7	11
Other sugar cakes	17	20	24			44	62
Cola	3	11	17	34	29	29	29
Foamcured soda water	7	8	11	14	12	14	14
Fruit juice	4	12	6	10	15	15	19
Coffee	16	27	24	40	40	45	42
Black tea	2	5	4	4	4	3	3
Cocoa			3	4	4	3	3
Ice cream	1	6	3	18	24	28	62
Ice cube	1	1	4	7	8	14	9
Other soft drink	11	21	23	14	14	24	43

Source : Economic Planning Board, Annual Reports on the Family Income and Expenditure Survey, 1968-1974

We have a somewhat conflicting picture about the relationship between the expenditure on processed food and income classes. Whereas the proportion of expenditures on processed foods to total food expenditure in urban families in 1965 was larger, the higher the family income level, the same proportion remained unchanged between income classes in 1974, as shown in Table I-6.

Data from rural household savings for the period from 1964 to 1974 show that expenditure on processed foods continued to occupy a very small proportion (4.6% to 7.5%) of food expenditures. In particular, the share of expenditures on confectioneries in food expenditure remains 0.5-0.7% over the same period as shown in Table I-7.

2. Income and Price Elasticities of Major Food Items

A number of studies of the food demand relationships in Korea are available which have used both cross-section and time-series data. Some studies have focused on income elasticities alone, and other studies have attempted to obtain both income and price factors. The magnitudes of these estimates of elasticities of the same food items are quite different from one study to another, depending on the types of data used (e.g. time-series or cross-section), the functional forms of demand relationships chosen (e.g. log-log, semi-log, etc.), the particular period concerned, urban

Table I-6(a). Expenditure on Processed Food By Income Classes (in 1965)

(in won)

Classification	Income class	Average or less								
		2,000	2,000-4,000	4,000-6,000	6,000-8,000	8,000-10,000	10,000-12,000	12,000-14,000	14,000 or more	
A. Food		5,550	1,110	2,240	3,340	4,450	5,460	6,550	7,180	10,050
B. Prepared food		110	10	30	50	70	110	120	160	250
	B/A (%)	(2.0)	(0.9)	(1.3)	(1.5)	(1.6)	(2.0)	(1.8)	(2.2)	(2.5)
C. Confectioneries & soft drinks		60		10	20	30	60	60	90	190
	C/A (%)	(1.1)		(0.5)	(0.6)	(0.7)	(1.1)	(0.9)	(1.3)	(1.9)
D. Total		170	10	40	70	100	170	180	250	440
	D/A (%)	(3.1)	(0.9)	(1.8)	(2.1)	(2.3)	(3.1)	(2.8)	(3.5)	(4.4)

Source : Annual Reports on the Family Income and Expenditure Survey, Economic Planning Board

Table I-6(b). Expenditure on Processed Food By Income Classes (in 1974)

(in won)

Classification	Average	19,999 or less	20,000- 27,777	28,000- 35,999	36,000- 43,999	44,000- 51,999	52,000- 59,999	60,000- 67,999	68,000- 75,999	76,000- or more
A. Food	20,800	9,260	12,090	15,490	19,150	21,280	23,690	26,850	28,570	36,690
B. Prepared food B/A(%)	750 (3.6)	360 (3.9)	460 (3.8)	550 (3.6)	710 (3.7)	800 (3.8)	890 (3.8)	950 (3.5)	1,050 (3.7)	1,180 (3.2)
C. Confectioneries & soft drinks C/A(%)	900 (4.3)	320 (3.5)	430 (3.6)	640 (4.1)	810 (4.2)	920 (4.3)	1,020 (4.3)	1,090 (4.1)	1,310 (4.6)	1,810 (4.9)
D. Total D/A(%)	1,650 (7.9)	680 (7.3)	890 (7.4)	1,190 (7.7)	1,520 (7.9)	1,720 (8.1)	1,910 (8.1)	2,040 (7.6)	2,360 (8.3)	2,990 (8.2)

Source : Economic Planning Board, Annual Report on the Family Income and Expenditure Survey.

Table 1-7. Expenditure on Processed Food in Rural Households (1964 - 1974)

Unit : In won

Classification	Year										
	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
A. Food	59,925	53,373	55,138	62,623	67,817	79,537	95,445	115,851	149,255	159,590	210,933
B. Prepared food (B/A)%	3,650 (6.1)	3,219 (6.0)	3,238 (5.9)	4,464 (7.1)	3,600 (5.3)	4,748 (6.0)	6,421 (6.7)	4,839 (4.2)	6,801 (4.6)	8,388 (5.3)	8,206 (3.9)
C. Confectioneries (C/A)%	281 (0.5)	314 (0.6)	362 (0.7)	419 (0.7)	548 (0.8)	576 (0.7)	721 (0.8)	837 (0.7)	819 (0.5)	1,262 (0.8)	1,514 (0.7)
D. Total (B+C)	3,931	3,533	3,600	4,883	4,148	5,324	7,142	5,676	7,620	9,650	9,720
D/A(%)	6.6	6.6	6.5	7.8	6.1	6.7	7.5	4.9	5.1	6.1	4.6

Source : Ministry of Agriculture, Forestry and Fishery, Annual Surveys on Income and Expenditures of farm Families, 1964 - 1974

and rural differences, and other factors. Of several major existing studies of food demand relationships in Korea, the most recent and most comprehensive one is a special report (No. 12) of Korean Agricultural Sector Simulation Project (KASS), a joint research project by National Agricultural Economics Research Institute (Seoul, Korea) and Michigan State University, Department of Agricultural Economics Team. Income and price elasticities of food items presented in this chapter were based on the results of this study. The study includes all food items grouped in accordance with the KASS twenty-commodity grouping (see commodity grouping in Table I-8). This KASS study has estimated a number of alternative sets of income and price elasticities for the commodity groupings on the basis of the available data of various types (time-series data, cross-section data, annual, quarterly data etc.) and the functional forms of demand relationships. The first problem was: which set of estimated elasticities will be chosen out of so many different sets and on what ground? Using some sort of averaging and consistency test scheme and on the basis of the most recent cross-section data available and time-series data for the 1965-74 period, the KASS report has presented a set of the best apparent estimates of income and price elasticities for food items which were used as parameters in the KASS model. This set of the estimated parameters of income and price elasticities for the twenty-commodity groups are presented in Table I-8.

Income elasticity for rice is .10 for farm population and .20 for non-farm population. Income elasticity for wheat was .90 for farm population and .50 for non-farm population. Income elasticities for barley, other grains, and potatoes have negative signs, prove showing that these items are inferior goods. Income elasticity for fruits is .75 for farm areas and 1.30 for non-farm areas. Income elasticity for beef is .94 for farm areas and 1.40 for non-farm areas, while that for chicken is .80 for farm areas and 1.00 for non-farm areas. Income elasticity for milk is 3.00 for farm areas and 3.20 for non-farm areas. Income elasticity for eggs is .40 for both farm and non-farm areas. Income elasticity for fish is 2.00 for farm households and 4.00 for non-farm households.

It is interesting to note that income elasticities for all items except wheat and pork are higher for non-farm areas than farm areas.

Price elasticities worked out through time-series data for the 1965-74 period suggest that they are of the order of (-) .20 and (-) .60 in the case of rice, barley, and other grains. Price elasticity for wheat is (-) .40 for farm areas and (-) .70 for non-farm areas. Price elasticity for vegetables is quite low (-) .10 for both farm and non-farm populations. Price elasticity for beef is (-) 1.80 for farm population and (-) 1.40 for non-farm population, whereas that for milk is (-) 1.50 for both farm and non-farm populations.

Table I-8. Income and Own Price Elasticities of Food Items

KASS Commodity Grouping	Income		Own Price	
	(F) Farm	(NF) Nonfarm	(F) Farm	(NF) Nonfarm
1. Rice	.10	.20	-.40	-.30
2. Barley	-.19	-.25	-.20	-.20
3. Wheat	.90	.50	-.40	-.70
4. Misc. Grains	-.10	-.30	-.60	-.60
5. Fruit	.75	1.30	-.35	-.85
6. Pulses	.30	.45	-.40	-.75
7. Vegetables	.30	.40	-.10	-.10
8. Potatoes	-.50	-.60	-.70	-.40
9. Tobacco	1.20	1.20	-.20	-.50
10. Industrial	.30	.80	-.50	-1.10
11. Beef	.94	1.40	-1.80	-1.40
12. Milk	3.00	3.20	-1.50	-1.50
13. Pork	.59	.55	-.50	-1.00
14. Chicken	.80	1.00	-.80	-1.20
15. Eggs	.40	.40	-.40	-.30
16. Fish	2.00	4.00	-.30	-.20
17. Non-food	.69	1.03		-.40

Source: NARI & Department of Economics, Michigan University

Demand Relationships for Food in Korea, 1965 - 1974

Special Report No. 12, Korean Agricultural Sector Simulation

Project (KASS), Jan. 1977

Price elasticities for pork and chicken are (-) .50 and (-) .80, respectively, for farm population while the same are (-) 1.00 and (-) 1.20 for non-farm populations.

It is also true that the price elasticities tend to be generally larger for non-farm population than for farm population. Price elasticities for fifteen out of the nineteen commodity groups are larger in the case of non-farm population than in the case of farm population. This finding may be partially accounted for by the fact that the estimates of elasticities for farm households are computed using total expenditure data (composed of cash purchases and self-produced consumption).

Table I-9 presents the set of price and expenditure elasticities for food of urban household members computed from urban household surveys for the period from 1965 to 1974. Food items with high expenditure elasticities are milk (3.30), chicken (2.62), confectionery (2.26), and processed food (1.37) in that order. Price elasticities fluctuate widely between food items and many estimates of price elasticities are not statistically significant.

3. Aggregate Demand Projection

Per Capita Demand : In the 1975 food balance sheet prepared by Ministry of Agriculture, Forestry and Fishery and FAO-Korea Association, the per capita demand for foodgrains,

Table I-9. Price and Expenditure Elasticities of Expenditure for Food of Urban Household Members, Annual Data, 1965-74

Code, & Food Group (Expend. On:)	Elasticity of Expenditure for Food Group								R ²
	Expen- diture	Own- Price	Cross-Price (with Respect to Food Group)						
			Code	Elas.	Code	Elas.	Code	Elas.	
RI	-.03*	.61							.89
Rice	.07*	.57	WH	.15					.95
	.24*	1.14	WH	.23	VE	.22	PO	-.41*	.99
BA	-.73	.74*							.79
Barley	-.74	1.24	MG	-.31*	VE	-.76			.95
	-.44	1.45	MG	-.63	VE	-1.59	BE	-2.81	.99
WH	1.50*	1.33							.41
Wheat flour	.86*	1.08*							.74
	-.11*	1.78	FR	5.92	VE	-1.93	PO	-1.14*	.98
MG	.43*	1.84*							.41
Other grains	-.94*	-2.00							.73
	-1.36*	1.65	PU	-3.31	VE	-2.35	MK	4.93	.99
FR	1.07	1.04*							.78
Fruits	.24*	1.10*							.93
	.32*	-1.09*	RI	-.45*	BA	-1.03	BE	3.16	1.00
							BE	3.34	
								TN	-4.78
PU	.32*	-.26*							.32*
Pulses	-.25*	-.20*							.77*
	-1.37*	.12*	WH	-1.50*	PO	.65*	CH	.99	.95
							CH	3.22*	
								FS	1.35*
VE	.59*	.52*							.40*
Vegetables	1.01	.83	PO	.71					.95
	.75	.73	PO	1.76	PK	2.47	CH	-.81	1.00
								TN	3.77
								TN	7.48
PO	.30*	.28*							.13*
Potatoes	1.23	-1.91							.87
	1.15	-2.32	VE	-.82*	MK	-3.87	EG	1.83*	.96
					MK	-3.10*	EG	2.67	
								TN	-3.57*
TT	.84	-.27*							.94
Tobacco	.84	-.27							.94
	.90	-1.21	MG	-1.17	PU	-.56	BE	-.70	1.00
								MK	-.18
BE	.59	.56*							.82
Beef	.25*	.70*	MG	-.36					.97
	.12*	1.90	MG	-.95	PU	.34*	PO	.81*	.99
								FS	1.21
								FS	1.23
MK	3.30	-3.10*							.77
Milk	3.30	-3.10*							.77
	1.98	7.19	BA	-1.50	WH	2.35	FR	4.53	1.00
								TN	-18.82
PK	.90	.53*							.93
Pork	.75	.95							.96
	.39*	.49*	RI	.22*	BA	-.62			1.00
					BA	-.56*	VE	-.26*	
								FS	.89*
CH	2.62	-1.26*							.85
Chickon	.39*	-1.53*							.96
	2.02	.19*	MG	-1.57*	BE	4.25			.99
					BE	3.24	MK	-3.18	
								FS	2.95*
								FS	1.04*
EG	.98	-.29*							.86
Eggs	.45*	-.79							.98
	.64	-.81*	RI	-.89*	BA	-1.44			.99
					BA	-1.18	MK	-.61*	
								PK	.74*
								PK	1.00*

Table I-9. (continued)

Code & Food Group (Expend. on:)	Expen- diture	Own- Price	Elasticity of Expenditure for Food Group								R ²
			Cross-Price (with Respect to Food Group)								
			Code	Elas.	Code	Elas.	Code	Elas.	Code	Elas.	
FS	.86	-.19									.85
Fish & seaweed	.86	-.19									.85
	.54	-.08	BA	-.25	PU	.74	PO	-.74	BE	.75	1.00
SP	.54	.02*									.62
Condiments (spices)	.99	-.18*	BE	-1.79							.84
	.46	-.54	BE	-3.18	PS	.60	CO	.22*	EO	1.72	1.00
PF	1.37	.49*									.80
Processed food	1.06	.16*									.97
	1.46	-2.28	FR	-.80*	PU	1.07	EQ	1.34	TN	-2.97	1.00
									TN	-5.30	1.00
CO	1.62	-1.08*									.94
Confectionery	2.26	.68*									.98
	1.94	.36*	BA	-1.06	MK	.76*	PK	.76*	TN	-3.78	1.00
									TN	-2.33*	1.00
LW	1.41	-.83*									.85
Liquor & wine	1.25	1.81									.99
	.63	-.05*	BA	-1.00	MK	-.49*	EO	1.75	TN	-4.78	1.00
									TN	-1.34	1.00
EO	.59*	1.57*									.78
Eating out	.61*	1.74*									.91
	-.27*	2.42	BA	-.82	PS	1.50	SP	-.25*	PF	1.89	.99
									PF	2.46	.99
TN	1.26	.17									.99+
Total nonfood	1.26	.17									.99+
	1.18	1.28	BA	-.45	WH	.18	MK	-.60	PS	.15	1.00+
TF	.53	-.91									.71
Total -- all food	.70	-.33*			LP	.51					.79
	1.00	-3.56	GR	.41	LP	.67	FR	-.25	TN	-4.63	.88
TT	.93	-1.14									.97
Total -- tobacco	.90	-1.26	GR	-.31*							.97
	.87	-1.51	GR	-.72	PF	-.75	CO	.45*	LW	-.62	.98
TN	1.23	.43*									.97
Total -- nonfood	1.04	1.32					LP	-.45			.98
	1.14	.12*	GR	-.57	ME	-.35*	LP	-.47	EO	.28*	.99

* Not statistically significant at the 5 per cent level of significance.

+ Statistical significance not shown.

Source: NAERI & Michigan State University Department of Economic, Demand Relationships for Food in Korea, 1965-1974, Special Report No. 12, Korean Agriculture (Sector Simulation) Project (KASS), Jan., 1977.

meats, and other food groups over the period from 1976 to 1981 was projected on the basis of the estimates of increase in per capita income and the projected income elasticities of demand. Table I-10 presents projected per capita demand for foods through 1981. The per capita demand for foodgrains except wheat is expected to decrease by 3 per cent and that for potatoes to fall by 15 per cent over the period between 1976 and 1981. The per capita demand for all other items is expected to grow at varying rates over the same period. Those items with high growth rate are seaweeds (130 per cent), milk (91 per cent), edible oils (82 per cent), nuts and seeds (58 per cent), fishery (53 per cent), fruits (34 per cent), chicken (35 per cent), pulses (29 per cent), and beef (26 per cent) in that order.

Aggregate Demand Projections : Much optimistic demand projections at the aggregate level through 1981 were made by the KASS group. These are presented in Table I-11. This table also indicates the degree of self-sufficiency in each food grouping. The items which are expected to have low percentage figures of self-sufficiency by 1985 are wheat (47.4 per cent), other grains (54.1 per cent), pulses (86.3 per cent), rice (96.1 per cent), vegetables (97.7 per cent). The self-sufficiency are expected to be attained in the case of all other items by 1985, according to this optimistic projection.

Table I-10. Food Demand Projection (1976-1981)

(Unit: one year per man;Kg)

Foods	Year					
	1976	1977	1978	1979	1980	1981
Grains	200.8	199.3	196.9	196.0	195.1	194.2
Rice	128.9	127.5	126.2	124.9	123.7	122.4
Wheat	29.0	29.4	30.1	30.9	31.7	32.4
Barley	39.1	37.3	35.9	35.1	34.1	33.3
Other grains	3.8	5.1	4.7	5.1	5.6	6.1
Potatoes	31.7	30.7	29.6	33.8	27.8	26.7
Sugars	8.2	9.3	10.5	11.9	13.5	15.4
Pulses	8.9	9.5	9.9	10.4	10.9	11.5
Bean	8.0	8.6	9.0	9.5	8.3	9.3
Nuts and Seeds	1.7	1.8	2.0	2.2	2.4	2.7
Vegetables	66.6	68.0	69.0	69.8	70.8	71.7
Fruits	14.4	15.4	16.3	17.2	18.2	19.3
Meats (A)	11.5	11.9	12.1	12.3	12.6	12.8
Meats (B)	7.0	7.2	7.3	7.5	7.6	7.8
Beef	1.9	2.0	2.1	2.2	2.3	2.4
Pork	3.4	3.4	3.3	3.3	3.2	3.1
Chicken	1.7	1.8	1.9	2.0	2.1	2.3
Eggs	3.9	4.0	4.1	4.2	4.3	4.4
Milk	3.4	4.0	4.5	5.1	5.8	6.5
Fishes	28.8	31.6	34.5	37.5	40.7	44.2
Seaweeds	4.2	4.8	5.8	6.9	8.2	9.8
Oils	2.8	3.2	3.6	4.0	4.5	5.1

Source: Ministry of Agriculture, Forestry and Fishery & FAO Korea Association, Food Balance Sheet, 1975

Table I-11. Supply and Disappearance of 14 Food Commodity Groups and 3 Industrial Crop Groups in Korea (1975, '80, '85*)

Commodity Alternative	Year	Supply			Disappearance				
		Production	Import (Surplus)	Total Food Supply [†]	Self-sufficiency	Consumption		Unaccounted [‡] for	Unaccounted for/Total**
		..... million MT.....			..... percentage		..... million MT.....		percentage
Rice	1975	4.623	.467	5.090	90.8	1.806	2.213	1.071	21.0
	1980	5.155	.321	5.476	94.1	1.664	2.607	1.205	22.0
	1985	5.614	.226	5.840	96.1	1.241	3.269	1.330	22.8
Barley [#]	1975	2.395	(.196)	2.199	108.9	1.285	.602	.312	14.2
	1980	2.324	(.277)	2.047	113.5	1.016	.721	.310	15.1
	1985	2.056	(.543)	1.513	135.9	.515	.712	.286	18.9
Wheat [#]	1975	.399	.794	1.193	33.5	.327	.824	.042	3.5
	1980	.668	1.005	1.673	39.9	.295	1.290	.088	5.3
	1985	1.012	1.124	2.136	47.4	.275	1.714	.146	6.8
Other grains	1975	.145	.008	.153	94.8	.090	.047	.017	11.1
	1980	.130	.022	.152	85.5	.080	.057	.015	9.9
	1985	.079	.057	.146	54.1	.056	.071	.009	6.2
Fruit	1975	.698	.014	.712	98.0	.128	.385	.197	27.7
	1980	.991	(.015)	.976	101.5	.149	.540	.287	29.4
	1985	1.336	(.025)	1.306	102.1	.157	.755	.396	30.3
Pulses	1975	.329	.055	.385	95.4	.148	.211	.025	7.3
	1980	.457	.056	.523	87.4	.175	.312	.036	6.9
	1985	.562	.089	.651	86.3	.186	.420	.046	7.1
Vegetables	1975	3.351	(.022)	3.329	100.7	.966	1.483	.879	26.3
	1980	3.823	.058	3.881	98.5	1.022	1.840	1.019	26.3
	1985	4.290	.099	4.389	97.7	.752	2.256	1.183	26.9
Potatoes	1975	1.128	.047	1.171	96.3	.260	.718	.188	16.1
	1980	1.558	(.044)	1.514	102.9	.210	1.030	.275	18.2
	1985	1.866	(.047)	1.819	102.6	.107	1.368	.344	18.9
Beef	1975	.053	(.002)	.051	103.9	.004	.043	.003	5.9
	1980	.090	(.003)	.087	103.4	.006	.075	.006	6.9
	1985	.143	(.006)	.143	100.0	.007	.126	.010	7.0
Milk	1975	.090	(.001)	.089	101.1	.016	.058	.015	16.9
	1980	.236	(.005)	.231	102.2	.026	.164	.042	18.2
	1985	.490	(.003)	.487	100.6	.033	.370	.089	18.3
Pork	1975	.110	.....	.110	100.0	.028	.078	.005	4.1
	1980	.130	(.003)	.127	102.4	.029	.093	.006	4.7
	1985	.155	(.003)	.152	102.0	.027	.118	.007	4.1
Chicken	1975	.095	.....	.095	100.0	.018	.079	.002	2.1
	1980	.150	(.004)	.146	102.7	.017	.127	.003	2.1
	1985	.225	(.005)	.220	102.5	.016	.196	.004	1.8
Eggs	1975	.210	.....	.210	100.0	.054	.123	.032	15.2
	1980	.360	(.002)	.358	100.6	.075	.224	.058	16.2
	1985	.570	(.007)	.563	101.2	.087	.379	.097	17.2
Fish	1975	.895	(.016)	.879	101.8	.153	.615	.111	12.6
	1980	1.290	.009	1.299	99.3	.170	.960	.168	12.9
	1985	1.740	(.002)	1.738	100.1	.154	1.346	.238	13.7

* "Unaccounted for" is the difference between the total food supply and rural and urban consumption. It includes marketing and production losses and "production deflators."
 ** "Unaccounted for/Total" is the proportion of the "total food supply" which is unaccounted for. Unusually low or high percentages may indicate inconsistencies among the various data inputs to the supply and demand components of the simulation model (e.g., yields, hectares, quantities imported, consumer survey data, price and income demand elasticities).
 † The results presented in this table ignore carry-ins and carry-outs from year to year.
 ‡ Total food supply is defined as production plus imports (or production minus surplus).
 § Surplus barley is utilized for livestock feed.
 ¶ Wheat imports are underestimated by about 200,000 MT.

Sources: KAERI & Michigan State University Department of Economics, Korean Agricultural Sector Analysis and Recommended Development Strategies, 1971-1985, (1972), pp. 122-123.

Nutritional Requirements : Another way of looking at the future demand is to compare actual average daily calorie intake of grains and animal products with targets. Table I-12 presents the comparison between average daily intake of grains and animal products by farm and non-farm residents for 1965-74 and targets. Actual calorie intake from grains in 1974 are far above targets for both farm and non-farm residents. Actual intake from animal and marine products are far below target. In the case of farm residents, 47 calories were taken per person per day in 1974, as compared with the target of 169 from animal and marine products. In the case of non-farm residents, 178 calories were taken from animal and marine products in 1974, as compared with the target of 386 calories. Naturally, the demand for high-protein foods through the shift of intake from grains to animal and marine products is expected to rise much rapidly over the period through 1985.

Table I-12. Average Daily Calorie Intake of Grains and Animal Products by Farm and Nonfarm Residents, 1965-74 and Target

Year	Grains			Animal & Marine Products			Total
	RI-BA-WH	RI-BA-WH-PO	RI-BA-WH-MG-PO	BE-PK-CH	BE-PK-CH-FS	BE-PK-CH-FS-MK-EG	
(calories per person per day)							
<u>Farm Residents</u>							
1965	1848	2098	2146	15	26	27	2283
1966	1759	2039	2083	25	37	38	2251
1967	1973	2233	2279	20	33	34	2457
1968	1970	2107	2146	17	31	32	2339
1969	1985	2162	2218	19	32	34	2447
1970	1974	2195	2248	20	34	36	2459
1971	2112	2342	2393	20	35	37	2601
1972	2031	2248	2292	20	38	40	2503
1973	2024	2206	2256	20	42	43	2471
1974	1978	2144	2215	20	45	47	2449
Target	1854	1984	2018	86	139	169	2584
<u>Non farm Residents</u>							
1965	1757	1890	1926	52	86	107	2186
1966	1632	1781	1813	77	114	138	2130
1967	1842	1980	2014	62	101	121	2338
1968	1865	1981	2010	56	100	131	2366
1969	1942	2037	2078	60	101	141	2488
1970	1934	2012	2043	65	107	143	2501
1971	2174	2255	2279	62	108	142	2738
1972	2086	2162	2189	64	119	159	2644
1973	2027	2087	2114	65	130	164	2582
1974	1996	2047	2095	66	142	178	2612
Target	1652	1704	1721	179	271	386	2694

Note: (1) Grains--Rice(RI), Barley(BA), Wheat(WH), Potatoes(PO), Miscellaneous Grains(MG)
 (2) Animal & marine products--Beef(BE), Pork(PK), Chicken (CH), Fish(FS) (& Seaweed), Milk(MK), Eggs(EG).

Source: Alan R. Thodey, "Food and Nutrition in Korea, 1965-74," KASS Special Report 11, 1976, Tables 6.3 and 6.4

CHAPTER II

SUMMARY OF FINDINGS FROM BREAD MARKET SURVEYS

1. Bread Consumer Behavior in Seoul

1-1. ASI Consumer Survey

One of the most recent and comprehensive bread consumer survey in the city of Seoul was conducted by ASI Market Research Inc. during the middle of 1976.¹⁾ Even though the survey data is limited to Seoul, it may certainly provide the basis of comparison with the survey data which have been gathered in the process of the test marketing for the soy-fortified bread.

The objective of ASI survey is to provide general picture of Korean bread consumer behavior in Seoul area, and hopefully to provide relevant and useful informations on urban bread consumers, which are needed in relation to compare the result of the test sales of the soy-fortified bread by Sam Lip Foods Co., Ltd.

The survey was conducted with a total sample of 750 households, which were selected at random and it was chosen to represent the entire 1.4 million households in Seoul. Among 750 samples 600 effective interviews were completed.

¹⁾ ASI Market Research Inc., Survey of Bread Consumption Pattern in Seoul, 1976

In the following the data were compiled and analyzed with these 600 interviews that completed. The general characteristics of bread consumers in Seoul are described in the following.

1-2. Summary of the Findings

Bread User and Habit : As Table II-1 shows still smaller portion of households (one-fourth of the total respondents) eat bread as a staple food in any meal. It shows that only about one out of ten households eats bread as a staple food at least several times a week, and another one out of seven households eats bread about once a week. In the report the former is classified as the heavy user and the latter as the light user. Moreover, most of bread is eaten by some members of a family irregularly either at breakfast or some other times as a snack.

Because of such nature of bread consumption in Seoul, the data shows that still a limited number (10 per cent) of the households have been eating bread by all family members at a meal (see Table II-2). And in one-sevenths of the total households bread is eaten by only some of family members.

The main bread users are the age group of five to nineteen years old, and a few of forty years old or more are found as the consumers of bread in a family. In other words, bread seems less popular as a staple food among aged groups,

Table II-1 Characteristics of Bread Users

<u>Housewife Age</u>		<u>Heavy user*</u>	<u>Light user*</u>	<u>Non-user</u>	<u>Total</u>			
20 - 29	(N=115)	3%	10%	87%	100%			
30 - 39	(N=230)	15	15	70	100			
40 +	(N=255)	11	15	74	100			
<u>Education</u>								
None & primary	(N=253)	5	8	87	100			
Middle & high	(N=286)	14	18	68	100			
College & over	(N= 61)	23	15	62	100			
<u>SES</u>								
Upper	(N= 78)	31	17	52	100			
Middle	(N=152)	14	22	64	100			
Lower	(N=370)	6	9	85	100			
<u>Kitchen Structure</u>								
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Western style	38	56.7	26	32.1	115	25.4	179	29.8
Traditional style	29	43.3	55	67.9	337	74.6	421	70.2
Total	67	100.0	81	100.0	452	100.0	600	100.0
	(11.2)		(13.5)		(75.3)			
<u>Occupation of Household head</u>								
Prof. & Mngr.	4	6.0	3	3.7	16	3.5	23	3.8
Self-employed	5	7.5	4	4.9	24	5.3	33	3.5
Cler. & skilled	36	53.7	30	37.0	167	36.9	233	38.9
Sales workers	15	22.4	32	39.5	117	25.9	164	27.3
Unskilled workers	2	3.0	4	4.9	82	18.1	88	14.7
Unemployed	5	7.5	8	9.9	46	10.2	59	9.8
Total	67	100.0	55	100.0	337	100.0	421	100.0

* Heavy user : At least several times week
 Light user : Once a week or less often.

and little hope might be given to explore a new bread market for older age group.

The figures in Table II-3 indicates that the majority of bread users have started eating bread relatively in recent years. Among those who buy bread regularly, about forty per cent of the housewives have been buying bread for four years or less. It implies that bread eating habit is slowly but steadily spreading among middle income younger households in Seoul. Also, it implies that an average Korean household still prefer rice much more than bread as a staple food.

Table II-2. Main Bread Users in the Family

<u>Persons</u>	<u>N</u>	<u>%</u>
All family	62	42
<u>Some members</u>	<u>86</u>	<u>58</u>
Total	148*	100%
<hr/>		
Under 5 years old	35	8
5 - 9 yrs. old	98	23
10 - 14 yrs. old	63	14
15 - 19 yrs. old	53	12
20 - 29 yrs. old	68	16
30 - 39 yrs. old	66	15
40 - 49 yrs. old	27	6
<u>50 yrs. old & over</u>	<u>28</u>	<u>6</u>
Total	438**	100%

* Number of total households who use bread at any frequency.

** Number of those who were indicated as the main bread users when only "some members within the family" are eating bread.

Table II-3. Length of Time Bread Eaten

<u>Length</u>	<u>Heavy user</u> (N=67)	<u>Light user</u> (N=81)	<u>Total</u> (N=148)
About 10 or more yrs.	16%	6%	11%
About 5 - 9 yrs.	25	20	22
About 2 - 4 yrs.	34	42	39
About 1 year	16	15	16
About 6 months	9	17	12
<hr/>	<hr/>	<hr/>	<hr/>
Total	100%	100%	100%

Therefore, it is assumed that it will take many more years to place bread for rice at any meal time, even though bread is readily available at fairly inexpensive cost in near future. In other words, the bread users are more likely to be college educated, and unper middle income class families with western style kitchen at their home. This fact suggests that bread is still considered as a special food for middle income class or above with higher education in Korea.

Even consumers who have been classified as heavy users consume around four bags a week and the light users consume around two to three bags (see Table II-4). The figures indicate that even among heavy users the amount of bread consumed in a week is not large in terms of the western standard (averaging four pounds a week). Moreover, the consumption of bread in each household may pluctuate considerably over the year, so that it is difficult to judge the amount of bread

used through single interview.

Such fact is indicated in Table II-5. It shows that over one-half of the bread users have expressed their seasonal preference in eating bread. Interesting fact to observe is that during early summer, when the harvest season for strawberry comes, it is often processed for jam at each household, so that more bread is eaten by the both heavy and light users during that time. The table also implies that during winter, when the prices of fresh fruits become more expensive, more bread is bought for a snack. Such peculiar consumption practices are widely known in Korea ever since bread and strawberry became easily accessible at reasonably costs.

Consumer Responses on Bread : Besides taking bread at home Korean consumers, especially, younger age group eats much of pastries at outside of their home. Table II-6 indicates that over one half of the bread users said that they had been eaten pastries. This means pastries are more widely eaten than bread by below average Korean consumers.

Table II-7 concerned with the reasons for not eating bread among those who do not eat it. "Expensive price" is listed as the major reason (53%) and "not accustomed to eat" as the second (35%). Therefore, it is evident that bread is still considered as one of expensive foods to an average Korean urban family.

Table II-4 Weekly Bread Consumption Volume

<u>Consumption Volume</u>	<u>Usage</u>		<u>Total</u> (N=148)
	<u>Heavy</u> (N=67)	<u>Light</u> (N=81)	
Less than 1 bag*	2%	9%	5%
1 bag	3	18	11
2 bags	18	34	27
3 bags	15	9	12
4 bags	21	21	21
5 bags	3	3	3
6 bags	22	1	11
7 bags	3	1	2
<u>More than 7 bags</u>	<u>13</u>	<u>4</u>	<u>8</u>
Total	100%	100%	100%
Average	4.39	2.67	3.45

* Note : 1 bag=15 slices or 450 grams

Table II-5 Seasonality in Eating Bread

<u>Seasons</u>	<u>Usage</u>		<u>Total</u> (N=148)
	<u>Heavy</u> (N=67)	<u>Light</u> (N=81)	
Spring(March-May)	6%	3%	4%
Summer(June-August)	15	17	16
Fall (Sept.-Nov.)	2	3	2
Winter(Dec. -Feb.)	6	24	15
Spring and Summer	5	1	3
Spring and Fall	2	7	5
Summer and Fall	2	3	2
Summer and Winter	~	1	1
<u>Irrespective of season</u>	<u>62</u>	<u>41</u>	<u>52</u>
Total	100%	100%	100%

Table II-6. Eating Pastries at Least Several Times a Week

<u>Eating Pastries</u>	<u>N</u>	<u>%</u>
Yes	307	51
No	293	49
<u>Total</u>	<u>600</u>	<u>100%</u>

<u>Who</u>	<u>N</u>	<u>%</u>
Under 5 years old	93	13
5 - 9 yrs. old	216	30
10 - 14 yrs. old	142	20
15 - 19 yrs. old	98	14
20 - 29 yrs. old	98	14
30 - 39 yrs. old	28	4
40 - 49 yrs. old	14	2
50 years old and over	21	3
<u>Total</u>	<u>710*</u>	<u>100%</u>

* Total number of those family members who eat pastries.

Table II-7. Reasons For Not Eating Bread

<u>Reasons</u>	<u>N*</u>	<u>%</u>
Expensive	239	53
No particular reasons; not accustomed	156	35
Not filling stomach	76	17
Do not like taste	46	10
Digest poorly	16	4
Elder's disliking	12	3
Others	50	11

* Multiple Answers, Base is 452 households who do not eat bread

Also, Table II-8 shows that still more than one third of families who were classified as non-bread users feel all their family members dislike bread irrespective of their socioeconomic class. Obviously it is a shocking statement to those who are trying to develop bread market in Korea. Also, almost another one-third of the "disliking" of bread is mentioned by housewives. It is particularly important, because they are the ones who used to purchase bread at a retail store.²⁾

1-3. Comments on ASI Survey

Based on the data presented above the following comments may be made concerning ASI Survey,

1. At present only a small proportion of urban households eat and purchase bread, and still a smaller number of households are classified as heavy users, who might be classified as very light users by United States standard.
2. For the majority of urban households in Korea bread is taken by only some member of a family. It is obvious that bread is not considered as a staple food by most Korean household.
3. Even though most Korean households still prefer rice much more than bread, there is some indication of spreading bread use among younger families. Yet, it may take many years for the majority of families to reach even

²⁾ See Table 2-1 of ASI report, p. 32

2. The Design of the Bread Consumer Surveys in the Test Markets

As a part of test marketing procedures of the soy-fortified bread a series of bread consumer surveys were planned independently by the research group of Sogang University. The methods and the processes adopted for the surveys were largely based on the agreement made between Dr. John Nickols, professor of agricultural economics at Texas A. & M. University, and Dr. Il-Chung Whang, the research leader of the project, in early 1976 and again in August 1976. For this research the former has been serving as the consultant to USDA. Specifically the following research plans were designed.

2-1. Specific Objectives of the Surveys

To achieve the following objectives five separate but interrelated surveys were conducted between June 1976 to February 1977. These are:

- (1) To find the relative sales of the existing bread and the new soy-fortified bread when the latter was marketed through test stores.
- (2) To find the nature of the changes of consumer attitude toward the newly sold soy-fortified bread by the Sam Lip Foods Co. when it is marketed.
- (3) To find the relationships of the price and the sales differences in different test markets.

- (4) To find various consumer responses upon the soy-fortified bread by the both buyers and non-buyers of the bread.
- (5) To find the effectiveness of the various promotional measures taken by Sam Lip Foods Co. during the test period.

2-2. The Test Market Selected

Income class was the major criterion of selecting test markets for the new bread in Seoul. In order to have reasonably good size of samples, yet, controllable size of the test markets, eight areas were chosen from sixty areas in different parts of the city. Also, for control purpose each of eight sales territories of the Sam Lip has become automatically a test market area. The specific dealers and areas chosen for the surveys is presented below.

Also, three groupings were made to conduct price experiments in the test markets, i.e., two high price markets, two medium price markets and four low price markets. The assignment of different prices in respective area is also presented in Table II-9.

For a test purpose such abnormal price spread was not initially approved by both Dr. Nickols and the resident research team, however, such strange pricing has been adopted with the consent of Dr. Fred Barrett who visited Seoul when the price of the bread had to be set before it was sold at

the test markets. Due to substantial expected loss of the Sam Lip, if the new bread is sold at the prevailing government regulated price of the regular bread, and due to the difficulty involved in obtaining government approval of the bread price at an appropriate level, such wide range of pricing with multiple price level experiments had to be undertaken.

Table II-9. The Dealers Selected and the Price Assigned

<u>Dealer</u>	<u>Income Class</u>	<u>Price Assigned¹⁾</u>
Sungdong	Low class	W140 (¢28) ²⁾
Wangshipri	The same as above	95 (¢19)
Suyuri	Lower and lower middle class	95 (¢19)
Jangwidong	The same as above	140 (¢28)
Banpo	Middle and some upper class apartment housing area	180 (¢36)
Youido	The same as above	95 (¢19)
Dongkyodong	Middle and upper class unit housing area	95 (¢19)
Moraenae and Yunhidong	The same as above	180 (¢36)

1) 540 grams per loaf. Initially Korean government permitted 450 grams, for a loaf, but for test purpose the company made a loaf of 540 grams.

2) The figure in the parentheses are converted to U.S. cents

2-3. The Sample Stores Selected

Average ten stores were chosen in each test market area include about ten stores. The sample stores were carefully chosen on the basis of the daily sales of the Sam Lip products including other than bread. Also, one or two so called "supermarkets" - larger and self-service type retail stores - were included unless such store was not found in the area to be surveyed. The sample test stores were chosen in the following manner (see Table II-10).

Table II-10. Sample Store Characteristics

<u>Store Class</u>	<u>Sample Stores to be selected in each Area</u>	<u>Actual Numbers of Stores Selected</u>
Class "A" (Sales ¹⁾ of W4,000 per day)	3 to 4	34
Class "B" (Sales of W3,000 per day)	2 to 3	26
Class "C" (Sales of W2,000 per day)	1 to 2	14
Supermarket	<u>1 to 2</u>	<u>10</u>
Total	<u>10</u>	<u>84</u>

1) Indicate total sales of Sam Lip products.

2-4. Nature of the Surveys Conducted

According to the objectives of the study a series of surveys were conducted in 1976 and in early 1977. The kinds of surveys conducted were presented as below.

- (1) A pre-sales survey of bread buyers at the sample stores (Survey I).
- (2) A survey of the soy-fortified bread buyers when it is actually bought at the sample stores (Survey II).
- (3) The follow-up interviews of the soy-fortified bread users at consumer's residence (Survey III).
- (4) The follow-up interviews of the none-users of the soy-fortified bread at consumer's residence (Survey IV).
- (5) The follow-up mail survey against the respondents of the previous survey III and IV (Survey V).

These surveys mentioned above were supposed to undertake in late February and to complete them in June 1976. However, due to unexpected delay of the production of the soy-fortified bread, the first two of the surveys have been completed in June and July. The other two surveys (III and IV) were conducted between August to September 1976. To find the consumer responses upon the soy-fortified bread by both buyers and the non-buyers of it, the final survey (V) was conducted during February 1977 by mail, after three months of market-wide introduction of the bread.

The number of completed interviews for five surveys are shown in the following (see Table II-11).

Table II-11. Number of Samples Interviewed

	<u>Actual No. of Interviews Completed</u>
Survey (I) (Pre-sales interview)	381
Survey (II) (Soy-fortified bread buyer)	455
Survey (III) (Soy-fortified bread buyers)	247
Survey (IV) (Non-buyer of soy-fortified bread)	195
Survey (V) (Follow-up mail survey)	<u>87</u>
Total	<u>1,365</u>

3. Survey Findings of Bread Consumer Behavior

3-1. Demographic Characteristics of Bread Users

As it is described in Section 2-4 five separate surveys were conducted in this study. However, Survey III (the soy-fortified bread user survey at the user's residence). Survey IV (non-user survey of the soy-fortified bread at consumer's residence), and survey V (the follow-up mail survey for the respondents of the previous surveys III and IV) are basically repeated interviews for the respondents of Survey I (pre-sales survey of bread buyers at the sample stores in test market area) and survey II (the survey of the soy-fortified bread buyers at the sample stores), who agreed to cooperate further interview at their residences.

Sample Size in Each Survey : The number of respondents in each survey by the test price, which was set for the soy-fortified bread, and by the test market area are shown in Table II-12. Due to some difficulty involved in obtaining active cooperation from the dealers and the stores assigned for the test, the sample in each area is not uniformly distributed, yet, in each price level of the test markets reasonable proportion of the sample size is maintained throughout the surveys. The average interviews completed for Survey I and II are 47 and 57 respectively, and for Survey III and IV the averages are 30 and 25 respectively. Unfortunately, only 87 responses by mail were obtained for Survey V, which is about thirty-five per cent of the total mail sent for the respondents of Survey III. However, it may be regarded rather high rate of return in comparison with other mail survey conducted for similar purpose. It is assumed that a small gift (a diary note-book) mailed out with the questionnaire, and the telephone call by the research assistants to the prospective respondents, seem to contribute to the higher return of the questionnaire. Some useful information has been obtained from the survey, particularly, concerning the post purchase behavior of the soy-fortified bread consumers.

Family Size of the Households : The family size of the buyers of either ordinary bread and/or the soy-fortified bread through Survey I to IV is shown in Table II-13.

Table II-12. Number of Respondents by Price Level

Price and Area	Survey I		Survey II		Survey III		Survey IV		Survey V		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
# 95												
Wangshipri	57	28.8	76	34.9	37	27.6	20	24.1	8	19.5	198	29.4
Suyuri	52	26.3	50	27.5	48	35.8	18	21.7	17	41.5	195	29.9
Youido	49	24.7	64	29.4	30	22.4	27	32.5	7	17.1	177	28.3
Dongkyodong	40	20.2	18	17.4	19	14.2	18	21.7	9	22.0	104	15.4
Sub-total	198	100.0	218	100.0	134	100.0	83	100.0	41	100.0	674	100.0
		(52.0)		(47.9)		(54.3)		(42.6)		(47.1)		(49.4)
#140												
Sungdong	41	41.0	34	38.2	12	27.3	18	32.1	10	47.6	115	37.1
Sangwidong	59	59.0	55	61.8	32	72.7	38	67.9	11	52.4	195	62.9
Sub-total	100	100.0	89	100.0	44	100.0	56	100.0	21	100.0	310	100.0
		(25.2)		(19.6)		(17.8)		(23.7)		(24.1)		(22.7)
#180												
Iampo	42	50.6	63	42.6	26	37.7	28	50.0	13	52.0	172	45.1
Moraenae	41	49.4	85	57.4	43	62.3	28	50.0	12	48.0	209	54.9
Sub-total	83	100.0	148	100.0	69	100.0	56	100.0	25	100.0	381	100.0
		(21.8)		(32.5)		(27.9)		(28.7)		(28.7)		(27.9)
Total	381	100.0	455	100.0	247	100.0	155	100.0	87	100.0	1,365	100.0

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48
1

Table II-13. Family Size of the Respondents

By Family Size	<u>Survey I</u>		<u>Survey II</u>		<u>Survey III</u>		<u>Survey IV</u>		<u>Total</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
2 to 3 persons	52	13.7	62	13.6	18	7.3	18	9.2	150	11.7
4 to 5 persons	178	46.7	206	45.3	112	45.3	71	36.4	567	44.4
6 to 7 persons	113	29.7	143	31.4	82	33.2	90	46.2	428	33.5
8 persons or more	35	9.2	44	9.7	35	14.2	16	8.2	130	10.2
No response	<u>3</u>	<u>0.8</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>3</u>	<u>0.2</u>
Total	381	100.0	455	100.0	247	100.0	195	100.0	1,278	100.0

Throughout the surveys more than two out of five families have a family size of four to five. And more than three out of four families have a family size of four to seven. Therefore, it implies that around five to six is the typical family size in Seoul.

Occupations of the Householders : Concerning the occupation of the householder fairly balanced distribution is found among the respondents of Survey I and II, except much smaller proportion of unskilled labourer as it is expected (see Table II-14). Because of their low income, unskilled labourers are not expected to purchase bread as much as the consumers of the other occupations classified in the table.

In Survey III and IV the respondents with the occupations of higher income category increased a little in comparison with Survey I and II. Particularly, the categories of middle management and small proprietor increased remarkably in proportion, on the other hand, the proportion of salesworkers and technicians decreased substantially. This may mean that the social class of the respondents in Survey III and IV are a little higher in comparison with the respondents in Survey I and II. It may also imply that the respondents of higher social class groups and upper middle income class tend to be more open with interviewers when one of them visit their residences.

Table II-14. Occupation of the Respondents

Occupation	Survey I		Survey II		Survey III		Survey IV		Total	
	N	%	N	%	N	%	N	%	N	%
Managerial & professional	62	16.3	73	16.0	39	15.8	31	15.9	205	16.0
Middle Management	52	13.7	48	10.6	42	17.0	32	16.4	174	13.6
Small proprietor	56	14.7	117	25.7	95	38.5	60	30.8	328	25.6
Clerical workers	84	22.0	116	25.5	40	16.2	37	19.0	277	21.7
Sales worker & technician	68	17.8	51	11.2	13	5.2	10	5.1	142	11.1
Unskilled workers	16	4.2	8	1.8	1	0.4	1	0.5	26	2.0
Others	37	9.7	42	9.2	17	6.9	20	10.3	116	9.1
No response	<u>6</u>	<u>1.6</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>4</u>	<u>2.1</u>	<u>10</u>	<u>0.8</u>
Total	381	100.0	455	100.0	247	100.0	195	100.0	1,278	100.0

Some difference in the proportion of occupational class is found in different test area. However, it does not serve to explain the difference of characteristics in each test area (see Table A. II-1, in Appendix).

Monthly Income of the Householders and the Size of

Residence : As indicated in Table II-15, an half of respondents have monthly income of W150,000 or more, and three-fourths (76.7%) have a monthly income of W100,000 or more. These facts imply that the income level of the respondents is generally higher than the average score of the nation. It is reported that in 1976 more than three-fourths of Korean wage earners have earned less than W100,000 per month.¹⁾ The occupations of respondents do have a close correlation with monthly income of the respondents. As it is shown in Table II-16 higher social class groups are related with the higher income group (see Table A. II-1 in Appendix).

In terms of the size of residence Table II-17 shows that two-fifths of the respondents live in more than thirty-one phyongs²⁾ (about 1,100 square feet). This is much higher per centage than the score found in ASI surveys³⁾ (only 12.7%). When the group of "21 to 30" phyong is added the proportion would become 70.8 per cent of the total. In Korea a household which has more than twenty phyong of residence is generally

1) Source : Tax Administration, the Republic of Korea

2) One phyong is equivalent to 36 square feet or 3.24 m².

3) See ASI Report, p. 44.

Table II-15. Monthly Income of Householder (won)

	Survey III		Survey IV		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
More than ₩ 400,001	13	5.3	6	3.1	19	4.3
₩250,001 - 400,000	37	15.0	32	16.4	69	15.6
₩150,001 - 250,000	70	28.3	63	32.3	133	30.1
₩100,001 - 150,000	70	28.3	48	24.6	118	26.7
₩ 70,001 - 100,000	38	15.4	26	13.3	64	14.5
Less than ₩ 70,000	19	7.7	10	5.1	29	6.6
No response	<u>0</u>	<u>0.0</u>	<u>10</u>	<u>5.1</u>	<u>10</u>	<u>2.3</u>
Total	247	100.0	195	100.0	442	100.0

Table II-16. Occupation and Monthly Income of Householder

Income	Managerial & professional jobs		Middle Management		Small proprietors		Clerical workers		Sales worker & technician		Unskilled worker		Others		No response		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
More than \$400,000	10	14.3	1	1.4	4	2.6	1	1.3	1	4.3	0	0.0	2	5.4	0	0.0	19	4.3
\$250,001-400,000	23	32.9	11	14.9	18	11.6	11	14.3	3	13.0	0	0.0	3	8.1	0	0.0	69	15.6
\$150,001-250,000	17	24.3	27	36.5	53	34.2	24	31.2	3	13.0	0	0.0	9	24.3	0	0.0	133	30.1
\$100,001-150,000	11	15.7	21	28.4	47	30.3	23	29.9	6	20.1	0	0.0	8	21.6	2	50.0	118	26.7
\$70,001-100,000	5	7.1	12	16.2	24	15.5	15	19.5	3	13.0	1	50.0	4	10.8	0	0.0	64	14.5
Less than \$70,000	0	0.0	1	1.4	9	5.8	3	3.9	6	26.1	1	50.0	9	24.3	0	0.0	29	6.6
No response	<u>4</u>	<u>5.7</u>	<u>1</u>	<u>1.4</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>4.3</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>5.4</u>	<u>2</u>	<u>50.0</u>	<u>10</u>	<u>2.3</u>
Total	70	100.0	74	100.0	155	100.0	77	100.0	23	100.0	2	100.0	37	100.0	4	100.0	442	100.0

Table II-17. Size of Residence by Monthly Income of Householder

Income	More than ₩400,000		₩250,001-400,000		₩150,001-250,000		₩100,001-150,000		₩ 70,001-100,000		Less than ₩ 70,000		No response		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Size (Phyong)																
More than 45	11	57.9	19	27.5	32	24.1	12	10.2	3	4.7	0	0.0	3	30.0	80	18.1
31 - 45	5	26.3	28	40.6	38	28.6	25	21.2	3	4.7	0	0.0	1	10.0	100	22.6
21 - 30	3	10.5	17	24.6	45	33.8	42	36.4	19	29.7	3	10.3	4	40.0	133	30.1
15 - 20	0	0.0	3	4.3	13	9.8	31	26.3	20	31.3	11	37.9	1	10.0	79	17.9
Less than 15	0	0.0	2	2.9	5	3.8	8	5.9	16	25.0	15	51.7	0	0.0	46	10.4
No response	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>3</u>	<u>4.7</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>10.0</u>	<u>4</u>	<u>0.9</u>
Total	19	100.0	69	100.0	133	100.0	118	100.0	64	100.0	29	100.0	10	100.0	442	100.0
	(4.3)		(15.5)		(30.1)		(26.7)		(14.5)		(6.6)		(2.3)			

151

regarded as lower middle class (see Table I. II-1 & 2 in Appendix).

Therefore, in terms of monthly income and the size of the residence, the majority of samples in this surveys are classified as middle class or above. That means, as it is assumed before, in terms of income and occupation the distribution of survey samples in this surveys do not represent true distribution of the universe, but it may certainly represent the distribution of bread users. In this respect the surveys may be identified as to represent the behavior of bread users who are also identified as middle income class or above.

3-2. Bread Consumption Habit

Amount of Bread Purchased : Fairly wide range of weekly bread consumption is found in Table II-18. The table indicates that the amount of weekly bread consumption is somewhat different in each survey, and the last two surveys (III and IV) show the amount of weekly consumption is slightly lower than the level found in the previous two surveys (I and II). On the whole only about two-fifths of the respondents purchases more than two loaves of bread per week. Another one-third of the respondents buy more than one to two loaves a week. Therefore, it might be said that an average Korean family does not eat much of bread, even though their income and social class are above average.

Table II-18. Weekly Bread Consumption (In loaf)

Loaf ¹	<u>Survey I</u>		<u>Survey II</u>		<u>Survey III</u>		<u>Survey IV</u>		<u>Total</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
0.5 or less than 0.5	42	11.0	29	6.4	29	11.7	24	12.3	124	9.7
More than 0.5 to 1	85	22.3	41	9.0	43	17.4	45	23.1	214	16.7
More than 1 to 1.5	56	14.7	89	19.6	51	20.6	44	22.6	240	18.8
More than 1.5 to 2	51	13.4	68	14.9	35	14.2	22	11.3	176	13.8
More than 2 to 3	57	15.0	87	19.1	37	15.0	33	16.9	214	16.7
More than 3 to 4	90 ²	23.6 ²	59	13.0	26	10.5	16	8.2	191	14.9
More than 4	<u>0</u>	<u>0.0</u>	<u>82</u>	<u>18.0</u>	<u>26</u>	<u>10.5</u>	<u>11</u>	<u>5.6</u>	<u>119</u>	<u>9.3</u>
Total	381	100.0	455	100.0	247	100.0	195	100.0	1,278	100.0

1 Averaging 600 grams per loaf

2 More than 4 is included

1
57
1

It is interesting to note that the respondents of Survey II and III consume more than those of Survey I and IV. Namely, 50.1 and 36.0 per cent vs 38.6 and 30.7 per cent respectively for those who consume more than two loaves a week. This may mean that the consumers who bought the soy-fortified bread are generally considered as heavier bread users than those who do not.

However, weekly bread consumption has a little correlation with the level of householder's monthly income. According to the table (Table II-18), 72 per cent of the family with the monthly income of W70,000 buy one or less than a loaf of bread, while 52.7 per cent of the family with monthly income of W400,000 buy more than two loaves (see Table A. II-4 & 5 in Appendix).

Concerning weekly bread consumption by family size a little positive relationship is found between family size and bread consumption. For an example in Table II-19, 72 per cent of the family with two or three members, and 39 per cent of the family with eight members or more in Survey III and IV consume less than 1.5 loaves of bread, while 55 per cent of the family with eight members or over consume two loaves or over, but only 17 per cent of the family with two or three members consume that much.

This result tells that the larger the family size is, the more bread is consumed, and vice versa. The relationship

Table II-19. Weekly Bread Consumption by Family Size (In loaf)

(Survey I)

Loaf	Family Size		2-3		4-5		6-7		8 or more		No response		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0.5 or less than 0.5	11	21.1	16	8.9	9	8.0	5	14.3	1	33.3	42	11.0		
More than 0.5 to 1	12	23.1	39	21.9	28	24.8	6	17.1	0	0.0	85	22.3		
More than 1 to 1.5	7	13.5	32	18.0	13	11.5	3	8.6	1	33.3	56	14.7		
More than 1.5 to 2	6	11.5	25	14.0	17	15.0	3	8.6	0	0.0	51	13.4		
More than 2 to 3	3	5.8	27	15.2	17	15.0	9	25.7	1	33.3	57	14.9		
More than 3	<u>13</u>	<u>25.0</u>	<u>39</u>	<u>21.9</u>	<u>29</u>	<u>25.7</u>	<u>9</u>	<u>25.7</u>	<u>0</u>	<u>0.0</u>	<u>90</u>	<u>23.6</u>		
Total	52	100.0	178	100.0	113	100.0	35	100.0	3	100.0	381	100.0		
	(13.6)		(46.7)		(29.7)		(9.2)		(0.8)					

(Survey III-IV)

0.5 or less than 0.5	8	22.2	24	13.1	19	11.0	2	3.9			53	12.0		
More than 0.5 to 1	7	19.4	37	20.2	34	19.8	10	19.6			88	19.9		
More than 1 to 1.5	11	30.6	42	22.9	34	19.8	8	15.7			95	21.5		
More than 1.5 to 2	4	11.1	29	15.8	21	12.2	3	5.9			57	12.9		
More than 2 to 3	2	5.6	28	15.3	28	16.3	12	23.5			70	15.8		
More than 3 to 4	3	8.3	14	7.7	19	11.0	6	11.8			42	9.5		
More than 4	<u>1</u>	<u>2.8</u>	<u>9</u>	<u>4.9</u>	<u>17</u>	<u>9.9</u>	<u>10</u>	<u>19.6</u>			<u>37</u>	<u>8.4</u>		
Total	36	100.0	183	100.0	172	100.0	51	100.0			442	100.0		
	(8.1)		(41.4)		(38.9)		(11.5)							

between weekly bread consumption and family size in the Survey III and IV is found closer than that in Survey I and II.

Bread Taking Habit : As Table II-20 shows on the average one-fourths of respondents take bread more than once a day. Because all respondents are bread buyers, they are expected to take bread at a meal. This figure is much higher than the one was found in ASI report (see ASI report p. 19). However, almost thirty per cent of the respondents replied that they eat bread rarely or do not eat at a meal. Therefore, those light users take little bread.

Concerning a habit of taking bread as a snack, which is shown in the lower half of Table II-20, the larger proportion of households seems to consider bread as an appropriate food for snack. Adding the replies up to more than once a week three-fourths of consumers are taking bread for a snack.

Also, no positive correlation is found between bread eating habit and family size. As Table II-21 shows no significant difference is found between the size of a family and the use habit of bread, except some heavier bread consumption by larger families in Survey III and IV.

On the other hand some positive relationship is found between use habit of bread as a meal and as a snack. As Table II-22 shows the more the consumer eat bread as a meal, the more they eat it as a snack too, and vice versa. For an example 46.7 per cent of those who eat bread as a meal more

Table II-20. Frequency of Taking Bread as a Meal and as a Snack

<u>As a Meal</u>	<u>Survey I</u>		<u>Survey II</u>		<u>Survey III</u>		<u>Survey IV</u>		<u>Total</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
More than once a day	91	23.9	133	29.2	60	24.3	31	15.9	315	24.6
3 times a week	83	21.8	117	25.7	64	25.9	42	21.5	306	23.9
Once a week	68	17.8	70	15.4	42	17.0	37	19.0	217	17.0
Rarely eat bread	59	15.5	111	24.4	71	28.7	75	38.5	316	24.7
Do not eat at all	20	5.2	19	4.2	10	4.0	7	3.6	56	4.4
No response	60	15.8	5	1.1	0	0.0	3	1.5	68	5.3
Total	381	100.0	455	100.0	247	100.0	195	100.0	1,278	100.0
<u>As a Snack</u>	<u>Survey I</u>		<u>Survey II</u>		<u>Survey III</u>		<u>Survey IV</u>		<u>Total</u>	
More than once a day	69	18.1	143	31.4	61	24.7	34	17.4	307	24.0
3 times a week	98	25.7	149	32.7	87	35.2	72	36.9	406	31.8
Once a week	62	16.3	87	19.1	58	23.5	56	28.7	263	20.6
Rarely eat bread	39	10.2	68	15.0	38	15.4	27	13.8	172	11.9
Do not eat at all	40	10.5	8	1.8	3	1.2	6	3.1	57	4.5
No response	73	19.2	0	0.0	0	0.0	0	0.0	73	5.7
Total	381	100.0	455	100.0	247	100.0	195	100.0	1,278	100.0

Table II-21. Bread Consumption Habit (as a Meal) by Family Size

(Survey I-II)

Family Size	2-3		4-5		6-7		8 or more		No response		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Taking bread as a meal												
More than once a day	31	27.2	109	28.4	64	25.0	19	24.1	1	33.3	224	26.8
3 times a week	26	22.8	99	25.8	55	21.5	20	25.3	0	0.0	200	23.9
Once a week	21	18.4	54	14.1	51	19.9	11	13.9	1	33.3	138	16.5
Rarely eat bread	24	21.1	78	20.3	50	19.5	17	21.5	1	33.3	170	20.3
Do not eat at all	7	0.1	14	3.7	10	3.9	8	10.1	0	0.0	39	4.7
No response	<u>5</u>	<u>4.4</u>	<u>30</u>	<u>7.8</u>	<u>26</u>	<u>10.2</u>	<u>4</u>	<u>5.1</u>	<u>0</u>	<u>0.0</u>	<u>65</u>	<u>7.8</u>
Total	114	100.0	384	100.0	256	100.0	79	100.0	3	100.0	836	100.0

(Survey II-IV)

More than once a day	8	22.2	30	16.4	35	20.3	18	35.3			91	20.6
3 times a week	13	36.1	50	27.3	32	18.6	11	21.6			106	24.0
Once a week	5	13.9	35	19.1	34	19.8	5	9.8			79	17.9
Rarely eat bread	9	25.0	57	31.1	65	37.8	15	29.4			146	33.0
Do not eat at all	1	2.8	9	4.9	5	2.9	2	3.9			17	3.8
No response	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>1.1</u>	<u>1</u>	<u>0.6</u>	<u>0</u>	<u>0.0</u>			<u>33</u>	<u>0.7</u>
Total	36	100.0	183	100.0	172	100.0	51	100.0			442	100.0

Table II-22. Relationships of Bread Eating Habits as Meal and as a Snack

Meal	More than 3 times once a day a week		Once a week		Rarely eat bread		Do not eat at all		No response		Total			
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>		
Snack														
More than once a day	147	46.7	73	23.9	15	6.9	52	16.5	9	16.1	11	16.2	307	24.0
3 times a week	58	18.4	130	42.5	81	37.3	90	28.5	19	33.9	28	41.2	406	31.8
Once a week	19	6.0	45	14.7	73	33.6	87	27.5	16	28.6	23	33.8	263	20.6
Rarely eat bread	38	12.1	18	5.9	24	11.1	78	24.7	9	16.1	5	7.4	172	11.9
Do not eat at all	20	6.3	19	6.2	13	6.0	1	0.3	3	5.4	1	1.5	57	4.5
No response	<u>33</u>	<u>10.5</u>	<u>21</u>	<u>6.9</u>	<u>11</u>	<u>5.1</u>	<u>8</u>	<u>2.5</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>73</u>	<u>5.7</u>
Total	315	100.0	306	100.0	217	100.0	316	100.0	56	100.0	68	100.0	1,278	100.0

than once a day, also, eat as a snack more than once a day. On the other hand, only 16.5 per cent of those who rarely eat bread as a meal eat it more than once a day as a snack.

Some correlation is found between the occupation and the use habit of bread consumers. As Table II-23 shows that a family holds managerial and professional job consume relatively more bread compared with other job holders. However, it can not be ignored that substantial proportion of households in all job classifications still identified as "rarely eat bread."

3-3. Bread Buying Habit

Buyer of Bread in a Family : As Table II-24 shows housewives are the major bread buyers at retail store. In both surveys over fifty per cent of bread purchase is done by the housewives. However, other family members also extensively participate in bread purchase. Particularly, a substantial proportion of bread is purchased by secondary school children. It is assumed that these children may play as a errand for their mothers when they asks their children to buy a particular brand of bread. This may mean that for an average consumer bread is considered as a convenience food for which a particular brand to be purchased is normally predetermined and easily available at a nearby store.

Reasons for Buying a Certain Brand of Bread : Among several reasons for buying a certain brand of bread "taste" is considered as the most important factor for the consumers.

Table II-23. Bread Eating Habit (as a Meal) by Occupation of the Householders

(Survey I-II)

Occupation Eating habit	Managerial & profess- ional		Middle manage- ment		Small proprie- tors		Clerical workers		Sales worker & technician		Unskilled workers		Others		No response		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
More than once a day	50	37.0	29	29.0	41	23.7	55	27.5	20	16.8	3	12.5	22	27.8	4	66.7	224	26.8
3 times a week	32	23.7	28	28.0	35	20.2	53	26.5	28	23.5	5	20.8	18	22.8	1	16.7	200	23.9
Once a week	22	16.3	12	12.0	34	19.7	30	15.0	25	21.0	5	20.8	9	11.4	1	16.7	138	16.5
Rarely eat bread	13	9.6	19	19.0	43	24.9	42	21.0	31	26.1	7	29.2	15	19.0	0	0.0	170	20.3
Do not eat at all	7	5.2	5	5.0	15	8.7	5	2.5	2	1.7	0	0.0	5	6.3	0	0.0	39	4.7
No response	<u>11</u>	<u>8.1</u>	<u>7</u>	<u>7.0</u>	<u>5</u>	<u>2.9</u>	<u>15</u>	<u>7.5</u>	<u>12</u>	<u>10.9</u>	<u>4</u>	<u>16.7</u>	<u>10</u>	<u>12.7</u>	<u>0</u>	<u>0.0</u>	<u>65</u>	<u>7.8</u>
Total	135	100.0	100	100.0	173	100.0	200	100.0	119	100.0	24	100.0	79	100.0	6	100.0	836	100.0

(Survey III-IV)

More than once a day	21	30.0	18	24.3	23	14.8	16	20.8	5	21.7	0	0.0	7	13.9	1	25.0	91	20.6
3 times a week	21	30.0	9	12.2	49	31.6	19	24.7	4	17.4	0	0.0	4	10.8	0	0.0	106	24.0
Once a week	11	15.7	16	21.6	27	17.4	14	18.2	2	8.7	0	0.0	7	18.9	2	50.0	79	17.9
Rarely eat bread	16	22.9	28	37.8	49	31.6	25	32.5	10	43.5	2	100.0	15	40.5	1	25.0	146	33.0
Do not eat at all	1	1.4	3	4.1	6	3.9	3	4.0	1	4.3	0	0.0	3	8.1	0	0.0	17	3.8
No response	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>0.6</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>4.3</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>2.7</u>	<u>0</u>	<u>0.0</u>	<u>3</u>	<u>0.7</u>
Total	70	100.0	74	100.0	155	100.0	77	100.0	23	100.0	2	100.0	37	100.0	4	100.0	442	100.0

Table II-24. Major Purchaser of Bread in the Family

	Survey III		Survey IV		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Father	12	4.9	7	3.6	19	4.3
Mother	137	55.5	100	51.3	237	53.6
Other adult member	15	6.1	14	7.2	29	6.6
Secondary school students	26	10.5	37	19.0	63	14.3
Primary school children	9	3.6	8	4.1	17	3.8
Pre-school children	20	8.1	12	6.2	32	7.2
Others	27	10.9	14	7.2	41	9.3
No response	<u>1</u>	<u>0.4</u>	<u>3</u>	<u>1.5</u>	<u>4</u>	<u>0.9</u>
Total	247	100.0	195	100.0	442	100.0

As Table II-25 shows over fifty per cent of the respondents places "taste" as the top priority for buying a particular brand of bread. The ratio would become higher, if a related portion of multiple reasons stated by the respondents is added. The table shows rather disappointing fact, because only a small per centage of the respondents have shown an interest on nutrition and economy when they choose a brand of bread.

Such finding is justified by Table II-26, which shows priority factor mentioned in buying bread. In the table still "taste" is placed over fifty per cent of the total. Although "nutrition" is placed as the second place it is evident that "nutrition" is considered as secondary concern of bread consumers. Moreover, only in five cases out of 247 price factor is mentioned, so that it is reasonable to assume that an average consumer does not concern much about price of bread, particularly, to middle income group or above.

3-4. Consumer Responses upon the Soy-fortified Bread

Mixed feeling of bread consumers has been found upon the soy-fortified bread in Survey II and III which are designed to deal solely the response of the new bread users. The respondents generally feel that the bread is nutritious and inexpensive, but not high quality bread in terms of taste and flavor. Therefore, the bread has failed to obtain favorable reaction at the initial stage of test sales from ordinary bread consumers. Specific responses of the buyers are presented

Table II-25. Reasons for Buying a Certain Brand of Bread

	Survey III		Survey IV		Total	
	N	%	N	%	N	%
Taste	120	48.6	103	52.8	223	50.5
Nutrition	15	6.1	14	7.2	29	6.6
Convenience	30	12.1	21	10.8	51	11.5
Economy	9	3.6	2	1.0	11	2.5
Multiple reasons	63	25.5	35	17.9	98	22.2
Others	<u>10</u>	<u>4.0</u>	<u>20</u>	<u>10.3</u>	<u>30</u>	<u>6.8</u>
Total	247	100.0	195	100.0	442	100.0

Table II-26. Priority in Purchasing Bread by Price Level

Price level Priority	# 95		#140		#180		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Flavor	72	53.7	20	45.5	37	53.6	129	52.2
Freshness	11	8.2	3	6.8	4	5.8	18	7.3
Texture	6	4.5	2	4.5	2	2.9	10	4.0
Nutrition	26	19.4	14	31.8	16	23.2	56	22.7
Reasonable price	2	1.5	2	4.5	1	1.4	5	2.0
Easily available	8	6.0	0	0.0	4	5.8	12	4.9
Others	8	6.0	3	6.8	5	7.2	16	6.5
No response	<u>1</u>	<u>0.7</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>0.4</u>
Total	134	100.0	44	100.0	69	100.0	247	100.0

in the following.

Response upon Multiple Pricing : As to the price of the soy-fortified bread only a few cases have been reported it as expensive bread. Majority of consumers responded it as cheap bread. As shown in Table II-27 the test markets, where 95 won was charged for a loaf of bread (450 grams per loaf), the reaction was overwhelmingly "very inexpensive:" And even where higher prices were charged the reaction was either "inexpensive" or "reasonable," so that the higher price level was not considered as a major concern of the bread buyers. Only few serious case of rejection was reported in both Survey II and III in the higher priced markets.

A favorable reaction toward the price of the soy-fortified bread was somewhat reduced in the latter survey (Survey III), yet, such high price was not considered as unreasonable to most of the consumers.

Response upon the Quality of the Bread : Despite the fact that such multiple and wide range of pricing test was adopted initial consumer reaction upon the bread was rather favorable. In all three markets where different test pricing were adopted consumers seems to believe the soy-fortified bread as nutritious bread. Table II-28 shows that many respondents regard the bread as well-nourished (50.6%) and inexpensive (25.9%) regardless of its quantity of bread consumed as a meal or as

Table II-27. Opinion on the Price of the Soy-Fortified Bread by Price Level

(a) Survey II

<u>Price</u>	# 95		#140		#180		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Very expensive	0	0.0	0	0.0	2	1.4	2	0.4
Fairly expensive	3	1.4	5	5.6	11	7.4	19	4.2
Reasonable	16	7.3	24	27.0	119	80.3	159	35.0
Fairly inexpensive	57	26.2	52	58.4	14	9.5	123	27.0
Very inexpensive	142	65.1	7	7.9	1	0.7	150	33.0
No response	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>1.1</u>	<u>1</u>	<u>0.7</u>	<u>2</u>	<u>0.4</u>
Total	218	100.0	89	100.0	148	100.0	455	100.0

(b) Survey III (In reference to regular and milk bread)

Very expensive	2	1.5	3	6.8	1	1.4	6	2.4
Fairly expensive	12	9.0	2	4.5	6	8.7	20	8.1
Reasonable	22	18.4	13	29.5	43	62.3	78	31.6
Fairly inexpensive	42	31.3	16	36.4	15	21.7	73	29.6
Very inexpensive	<u>56</u>	<u>41.8</u>	<u>10</u>	<u>22.7</u>	<u>4</u>	<u>5.8</u>	<u>70</u>	<u>28.3</u>
Total	134	100.0	44	100.0	69	100.0	247	100.0

Table II-28. Opinion of the Respondents on the Feature of the Soy-Fortified Bread by Price Level

Price level Opinion	#95		#140		#180		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
As a nutritious bread	62	46.3	23	52.3	40	58.0	125	50.6
As an inexpensive bread,	47	35.1	10	22.7	7	10.1	64	25.9
As a delicious bread	6	4.5	3	6.8	3	4.3	12	4.9
As another brand of bread	11	8.2	1	2.3	7	10.1	19	7.7
As another kind of bread	7	5.2	4	9.1	7	10.1	18	7.3
As an expensive bread	0	0.0	1	2.3	0	0.0	1	0.4
As a bad-quality bread	<u>1</u>	<u>0.7</u>	<u>2</u>	<u>4.5</u>	<u>5</u>	<u>7.2</u>	<u>8</u>	<u>3.2</u>
Total	134	100.0	44	100.0	69	100.0	247	100.0
	(54.3)		(17.8)		(27.9)			

a snack. Moreover, interesting fact is observed, that is, where the higher price was charged to the bread, the higher per centage of such positive feeling upon the bread is reported. On the other hand, where the lower price was charged consumers tends to emphasize it's inexpensive feature.

For more concrete and detail consumer responses on the quality of the bread the following Table II-29 may serve to provide an useful information. In general the quality of soy-fortified bread is considered as fair, yet, the bread user's opinion is divided into good and poor too. This implies that the quality of the bread should be improved. Moreover, the respondents had definitely negative opinion for it's flavor, odor, texture, colour, and the like. Moreover, it is found that the consumers who used to buy so called "milk bread" had more unfavorable reaction to it's features (see Table A. II-7, in Appendix).

However, due to repeated trial of Sam Lip Foods Co., to make better bread such unfavorable reactions seem to be somewhat reduced after the bread was introduced for market-wide distribution in late November. As Table II-30 shows the buyer's opinion on the soy-fortified bread was somewhat improved, particularly, on the quality feature of the bread. That is, negative opinion on the flavor, odor, texture, and colour of the bread has been reduced a little. However, such improvement was not strong enough to change preconceived unfavorable opinion of the bread.

Table II-29 Opinion on the Features of the Soy-Fortified Bread
(In Reference to Regular and Milk Bread)
(For Survey III)

Features Opinion	Flavor		Odor		Texture		Colour		Stickiness		Shape		Thickness of a piece		Package design		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Excellent	10	4.0	4	1.6	8	3.2	6	2.4	2	0.8	4	1.6	3	1.2	14	5.7	51	2.6
Good	52	21.1	31	12.6	48	19.4	72	29.1	76	30.8	56	22.7	60	24.3	71	28.7	466	23.6
Fair	64	25.9	114	46.2	80	32.4	100	40.5	69	27.9	163	66.0	149	60.3	139	56.3	878	44.4
Poor	116	47.0	95	38.5	105	42.5	66	26.7	93	37.7	23	9.3	35	14.2	20	8.1	553	28.0
Very poor	<u>2</u>	<u>2.0</u>	<u>3</u>	<u>1.2</u>	<u>6</u>	<u>2.4</u>	<u>3</u>	<u>1.2</u>	<u>7</u>	<u>2.8</u>	<u>1</u>	<u>0.4</u>	<u>0</u>	<u>0.0</u>	<u>3</u>	<u>1.2</u>	<u>28</u>	<u>1.4</u>
Total	247	100.0	247	100.0	247	100.0	247	100.0	247	100.0	247	100.0	247	100.0	247	100.0	1,976	100.0

**Table II-30 Attitude on the Quality of the Soy-Fortified Bread
(In Comparison with Regular and Milk Bread)
(For Survey V)**

	Flavor		Oder		Texture		Colour		Package design		Size of the bread of a piece		Thickness		Stickiness	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Excellent	4	6.9	1	1.7	6	10.3	3	5.2	5	10.3	3	5.2	5	8.6	4	6.9
Good	19	32.8	25	43.1	26	44.8	25	43.1	28	48.3	25	43.1	20	34.5	22	37.9
Fair	21	36.2	19	32.8	10	17.2	18	31.0	18	31.0	25	43.1	27	46.6	21	36.2
Poor	12	20.7	11	19.0	15	25.9	12	20.7	5	8.6	5	8.6	6	10.3	9	15.5
Very poor	<u>2</u>	<u>3.4</u>	<u>2</u>	<u>3.4</u>	<u>1</u>	<u>1.7</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>1.7</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>3.4</u>
Total	58	100.0	58	100.0	58	100.0	58	100.0	58	100.0	58	100.0	58	100.0	58	100.0

As Table II-31 shows, because most of the bread consumers are interested in good quality bread, and not in low price or poor quality bread, the unfavorable opinion established among the bread users seems to remain for a while. To them good quality means good flavor, odor, and so on, therefore, at this stage the bread with poor quality would have little chance to succeed in market-wide distribution.

Reasons for the Discontinued Purchase of the Bread :

Unfortunately, almost one half of the respondents who had purchased the soy-fortified bread did not have another chance to have it, and another one-fourth of the buyers did have repeated buying it only once or twice more. As in Table II-32 the price had some effect on the repeated sales, but not to the degree that the researchers expected. The act of discontinuation of the bread purchase must be explained in different angle. (See Table A, II-8 in Appendix)

According to the respondents of Survey III primary reason for the discontinuation of buying the bread can be explained as poor quality, including taste, colour and texture of the bread (see Table II-33). Almost one half of the respondents expressed their unpleasant experience of having poor quality of the soy-fortified bread. This may mean that the consumers who had negative feeling on the bread did not pay any more attention to it when they purchase bread again. It is unfortunate to have someone who had been unable to buy the bread

Table II-31 Opinion on the Further Purchasing Intention
of the Soy-Fortified Bread by Price Level

Opinion	Price level	# 95		#140		#180		Total	
		N	%	N	%	N	%	N	%
Good quality but expensive	Will always buy	64	47.8	23	52.3	35	50.7	122	49.4
	Will occasionally buy	64	47.8	21	47.7	24	34.8	109	44.1
	Will rarely buy	6	4.4	0	0.0	8	11.6	14	5.7
	Will not buy at all	0	0.0	0	0.0	2	2.9	2	0.8
Total		134	100.0	44	100.0	69	100.0	247	100.0
Inexpensive but poor quality	Will always buy	2	1.5	0	0.0	1	1.4	3	1.2
	Will occasionally buy	9	6.7	3	6.8	8	11.6	20	8.1
	Will rarely buy	35	26.1	22	50.0	13	18.8	70	28.3
	Will not buy at all	88	65.7	19	43.2	47	68.1	154	62.4
Total		134	100.0	44	100.0	69	100.0	247	100.0

Table II-32. Buying Experience of the Soy-Fortified Bread
by Price Level

Price level Experience	# 95		#140		#180		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Once	63	47.0	22	50.0	27	39.1	112	45.3
Two to three	41	30.6	7	15.9	21	30.4	69	27.9
Four to six	12	9.0	4	9.1	4	5.8	20	8.1
More than once in each week	15	11.2	7	15.9	9	13.0	31	12.6
Don't remember	<u>3</u>	<u>2.2</u>	<u>4</u>	<u>9.1</u>	<u>8</u>	<u>11.6</u>	<u>15</u>	<u>6.1</u>
Total	134	100.0	44	100.0	69	100.0	247	100.0

Table II-33. Reasons for Discontinuation of Buying the Soy-Fortified Bread by Price Level

Price level Reason	# 95		#140		#180		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Poor taste	52	38.8	12	27.3	29	42.0	93	37.7
Poor colour	3	2.2	1	2.3	0	0.0	4	1.6
Harsh texture	10	7.5	1	2.3	2	2.9	13	5.3
Uneconomical	1	0.7	0	0.0	2	2.9	3	1.2
Not available	8	6.0	6	13.6	4	5.8	18	7.3
Not interested	12	9.0	4	9.1	7	10.1	23	9.3
Poor keeping quality	5	3.7	1	2.3	1	1.4	7	2.8
Unspecified	30	22.4	13	29.5	19	27.5	62	25.1
No response	<u>13</u>	<u>9.7</u>	<u>6</u>	<u>13.6</u>	<u>5</u>	<u>7.3</u>	<u>24</u>	<u>9.7</u>
Total	134	100.0	44	100.0	69	100.0	247	100.0

at the test stores (7.3%). It is certain that the level of price had only minor effect upon the bread purchase.

On the other hand, the data from Survey V, which was conducted after three months of the product introduction (see Table II-34), indicate that unlike the previous responses shown in Survey III the buyers as well as retail stores paid little attention about the soy-fortified bread. The fact, that out of 87 samples thirteen consumers were unable to find the bread at retail stores, may imply the lack of interest in the bread itself by consumers, retailers, and, to some extent, the dealers of the product.

It may also suggests that the bread distribution system was not effectively functioning during the initial period of market-wide distribution. Such reasoning may be justified by the fact that exactly one-third of the respondents did not purchased after a trial purchase during the test marketing period. It may be explained as unavailability of the bread at nearly retail stores (see Table A. II-9 in Appendix).

3-5. Source of Information on the Soy-fortified Bread

Source of Information Obtained : In spite of active promotional measures had been taken by Sam Lip Foods Co., by means of sample distribution with promotional leaflet, distribution of indoor posters for retailers, and distribution of leaflet which was inserted in all soy-fortified bread, a word

Table-II-34. Reasons for Discontinuation of Repurchasing Soy-Fortified Bread

	<u>N</u>	Total <u>%</u>
Poor taste	8	9.2
Poor colour	1	1.1
Harsh texture	1	1.1
Uneconomical	3	3.4
Not available	13	14.9
Not interested	5	5.7
Poor keeping quality	1	1.1
No specific reason	17	19.5
Multiple answers	16	18.4
No response	<u>22</u>	<u>25.3</u>
Total	87	100.0

of mouth communication had been the major source of spreading the information to consumers on the soy-fortified bread.

Table II-35 presents how the consumers did obtain needed information of the bread. It shows almost an half of the consumers had been aware of the bread either through "others" or "by chance." Surprisingly only one-fourth of consumers were informed directly through the promotional means taken by the company.

Also, the table shows that depending on the area the source of information varies substantially. It may be an indication to measure the effectiveness of the test retail stores and the dealers chosen for the promotion of the bread.

Effectiveness of Promotion : Some difference in the source of information is found in Table II-36, which is derived from Survey V. Since the company introduced radio advertising when the bread was introduced, the effect of the advertising is shown on the table. However, because of insufficient volume of radio advertising the awareness of radio advertising message for the soy-fortified bread seems to be relatively low, and the effectiveness of it is also considered as insignificant.

At any rate Sam Lip Foods Co. had been given little benefit from the store poster and the leaflet which was distributed through the sample retail stores. The surveys have found that, without active support of the retail stores, it is difficult

Table II-35. Source of Information about the Soy-Fortified Bread by Dealer Area

Dealer Source	Sungdong		Wangshipri		Suyuri		Jangwidong		Youido		Banpo		Dongkyodong		Moraena		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Taste of sample	1	8.3	3	8.1	12	25.0	13	40.6	13	43.3	6	23.1	2	10.5	9	20.9	59	23.9
Posters in a store	0	0.0	3	8.1	6	12.5	4	12.5	2	6.7	4	15.4	2	10.5	1	2.3	22	8.9
A leaflet	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
From other family member	1	8.3	2	5.4	2	4.2	3	9.4	7	23.3	2	7.7	0	0.0	4	9.3	21	8.5
From others	5	41.7	17	45.9	10	20.8	3	9.4	3	10.0	8	30.8	1	5.3	7	16.3	54	21.9
By chance	3	25.0	9	24.3	16	33.3	6	18.8	3	10.0	5	19.2	7	36.8	11	25.6	60	24.3
Others	2	16.7	3	8.1	2	4.2	3	9.4	2	6.7	1	3.8	5	26.3	11	25.6	29	11.7
No response	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	10.5	0	0.0	2	0.8
Total	12	100.0	37	100.0	48	100.0	32	100.0	30	100.0	26	100.0	19	100.0	43	100.0	247	100.0
	(4.9)		(15.0)		(19.4)		(13.0)		(12.1)		(10.5)		(7.7)		(17.4)			

Table 11-36. Source of Information about the Sov-Fortified Bread by Area

	Suyuri		wangshipri		Youido		Dongkyodong		Sungdong		Jangwidong		Koraenae		Banpo		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Posters in a store	2	11.8	1	12.5	1	14.3	0	0.0	1	10.0	1	9.1	0	0.0	0	0.0	6	6.9
A leaflet	2	11.8	0	0.0	1	14.3	0	0.0	0	0.0	1	9.1	2	16.7	1	7.7	7	8.0
From other family members	2	11.8	1	12.5	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	4	4.6
From others	1	5.9	0	0.0	1	14.3	1	11.1	1	10.0	0	0.0	1	8.3	2	23.1	8	9.2
Radio advertising	2	11.8	2	25.0	2	28.6	1	11.1	3	30.0	2	18.2	0	0.0	2	15.4	14	16.1
By chance	6	35.3	2	25.0	1	14.3	3	33.3	4	40.0	5	45.5	7	58.3	5	38.5	33	37.9
Others	0	0.0	1	12.5	0	0.0	2	22.2	0	0.0	0	0.0	2	16.7	0	0.0	5	5.7
No response	<u>2</u>	<u>11.8</u>	<u>1</u>	<u>12.5</u>	<u>1</u>	<u>14.3</u>	<u>1</u>	<u>11.1</u>	<u>1</u>	<u>10.0</u>	<u>2</u>	<u>18.2</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>15.4</u>	<u>10</u>	<u>11.5</u>
Total	17	100.0	8	100.0	7	100.0	9	100.0	10	100.0	11	100.0	12	100.0	13	100.0	87	100.0
	(19.5)		(9.2)		(8.0)		(10.3)		(11.5)		(12.6)		(13.8)		(14.9)			

to promote the bread successfully.

3-6. Comments on the Survey Findings

A few comments on the surveys conducted for bread consumers are made as follows.

Bread Consumption and Habit

1. Throughout the surveys above average consumer, in terms of income as well as social class, had been contacted and interviewed. Therefore, it cannot be denied that the figures shown in the tables will be somewhat higher than an average household consumption in urban area. Moreover, because the surveys were made for the consumers in Seoul, the figures would represent the level of bread consumption and habit of the residents in Seoul.
2. Throughout the surveys it is found that, because of economic consideration in addition to long lasting diet habit, lower class consumers are generally not interested in bread consumption. It implies that bread is extensively eaten either by middle or above income class consumers, or and by younger generation, as a snack.
3. Concerning a eating habit of bread the consumers who eat more bread as a meal generally takes more bread as a snack. This may mean that such neavy users already developed a bread use habit.

4. Concerning the consumption of the soy-fortified bread some differences were found between the heavy-users and the light users of bread. Namely, it may be stated that to some extent heavy-users paid more attention to the soy-fortified bread than the light users.
5. Majority of bread consumers prefers to have good taste of bread than price cut. This means that bread is usually eaten as a substitute for a meal rather than as a meal itself. Therefore, much of bread is also consumed by youngsters at other than home.

Consumer Responses upon the Soy-fortified Bread

1. Many respondents regarded the bread as inexpensive bread, especially at 95 won markets where the lowest price was charged. Surprisingly only small proportion of consumers regarded as expensive one in 180 won markets. In this respect Korean consumers seem to have rather indifferent attitude upon the price of bread up to certain price level.
2. Concerning the quality of the bread many still assess the bread as an inferior product. Especially the opinion of those who compares it with milk bread shows more unfavorable responses upon it.
3. Repeated bread sales was found among a small proportion of the bread consumers. As it was pointed out it is

assumed that unfavorable response of the users upon the quality of the bread made them to terminate the repurchase of the bread. The uniqueness of the bread is easily be offsetted by the "poor taste" of the bread.

4. Most respondents show their interest of the soy-fortified without adherence to price. Rather they intend to purchase it as long as that keep good tasty bread.

Source of Information

1. Among the sources of information "words of mouth" advertising influenced most to disseminate the information on the bread.
2. It may means other promotional means were not effectively employed during the test marketing period as well as during the initial market-wide introduction of the bread.

CHAPTER III

SALES ANALYSIS OF BREAD AND THE SOY-FORTIFIED BREAD

1. The Soy-fortified Bread Sales during the Test Market Period (July and August 1976)

1-1. Decisions Concerning Test Marketing

This part of the report presents an statistical analysis of the test sales records of bread as a whole including the sales of the soy-fortified bread which was made by Sam Lip Foods Co., Ltd. during July and August 1976. The latter was marketed for test purpose through eighty-four preselected sample retail foods stores in eight territories among over sixty sales territories of the Sam Lip Co. around Seoul. Basically the same sample retail stores, which had been selected for initial bread user surveys during June and July 1976, were chosen for the sales test of the soy-fortified bread. The number of sample foods retail stores assigned to each test area are shown in the following Table III-1.

The related marketing decisions for the test marketing is presented in the following.

Pricing of the Soy-fortified Bread and the other Bread:

As it is shown in the previous table on the basis of experimental pricing levels of the soy-fortified bread three groupings of the test sales areas were arbitrarily made to conduct

price experiments. Based on the government permit, which was obtained just before the test sales begun in July 1976, the Sam Lip has been able to charge any retail price up to 180 won for a loaf (450 grams) of the soy-fortified bread.¹ Therefore, for a test purpose such abnormally wide spread of the bread prices were adopted.

Table III-1. Number of Selected Stores for the Test Sales of the Soy-fortified Bread by Territory

	<u>Number of Store</u>		<u>Total</u>
	<u>Regular Retail</u>	<u>Supermarket</u>	
Group I (W 95 territories)			
Suyuri	8	2	10
Wangshipri	10	0	10
Youido	10	0	10
Dongkyodong	8	2	10
Group II (W140 territories)			
Sungdong	10	2	12
Jangwidong	8	2	10
Group III (W180 territories)			
Moraenae	10	0	10
Banpo	<u>10</u>	<u>2</u>	<u>12</u>
Total	74	10	84

¹ Because of the strict price control of the government, and because bread is classified as one of daily necessity, the factory as well as the retail price of any new bread must be examined and approved by the Bureau of Price Control, Economic Planning Board.

Table III-2 presents the price list and its marketing spreads of bread which sold by the Sam Lip at the time of the test sales was conducted. As the table shows, in cheapest priced areas of Group I the soy-fortified bread was charged at even cheaper, in terms of its weight, than so called "regular" bread of the Sam Lip. The price of bread is normally controlled by the government and priced as cheapest. As a result the quality of bread was rather poor. On the other hand, in the area of Group III the bread was charged almost as high as so called "milk" bread of the Sam Lip. Therefore, when the test sales was conducted it was naturally assumed that such wide spread of the bread price would immediately be reflected to the sales amount of the soy-fortified bread in different areas.

Regarding to the marketing spreads of bread including the soy-fortified bread, Table III-2 also shows that the milk bread has a little higher rate of margin than the other bread. It is obvious that it provided little incentive to the Sam Lip dealers as well as to the retailers in promoting the soy-fortified bread with special care and interest.

Product Features of the Soy-fortified Bread : Again based on the conditions of the government permit, which specified the lower limit of the weight of the bread as

Table III-2. Bread Prices and Marketing Spread
(Effective during the Test Period)

(Unit: Won)

	Factory price	Dealer price	Salesman price	Retail price
Regular Bread (800 gr.)	143.50 (75.5%)	152.00 (80.0%)	165.00 (86.8%)	190.00 (100.0%)
Regular Bread (400 gr.)	69.50 (73.2)	73.50 (77.4)	80.00 (84.2)	95.00 (100.0)
Milk Bread (450 gr.)	139.00 (69.5)	147.00 (73.5)	160.00 (80.0)	200.00 (100.0)
Milk Bread (200 gr.)	69.50 (69.5)	73.50 (73.5)	80.00 (80.0)	100.00 (100.0)
Soy-fortified Bread (450 gr.)				
Group I (W 95)	69.50 (73.2)	73.50 (77.4)	80.00 (84.2)	95.00 (100.0)
Group II (W140)	102.50 (73.2)	108.00 (77.4)	118.00 (84.2)	140.00 (100.0)
Group III (W180)	131.50 (73.2)	140.00 (77.4)	152.00 (84.2)	180.00 (100.0)

450 grams along with the price, the company set the weight of the bread to 530 grams for a loaf. Such extra weight was given to induce favorable reaction from bread consumers during the introductory test period. Also it was the maximum allowable weight that could be accepted to the company to assure some profit from the sales of the soy-fortified bread. However, on the package of the bread the weight was labeled as 450 grams, because the company hoped to avoid any legal complication when the weight reduction was needed.

As it is shown in Figure III-1 the package was designed with brown color. It was rather unique and resembles to the color of the bread packed, so that it was reasonably well received by the company personnels and consumers as well.

In order to show the bread size bigger the round top form was chosen for the soy-fortified bread. Therefore, it was almost identical in size and shape as the milk bread which has been the most popular and profitable bread of the Sam Lip. Only the difference in appearance between the soy-fortified bread and the milk bread was its color. The latter had much cleaner image i.e., snow-white with milk flavor. On the other hand the soy-fortified bread had brownish color with some soy bean flavor.

Figure III-1. Package Design of the Soy-fortified Bread



Because of technical difficulty involved in removing such unpleasant odor, the soy-fortified bread had some handicap from the beginning to promote it successfully. Also, the soy-fortified bread had somewhat harsh texture, particularly, in compared to milk bread, so that it was recommended to serve as toast.

In order to measure more meaningful reactions upon the sales of the soy-fortified bread and upon the regular bread, specially packed half-weight of regular bread (450 grams), which also had round top form as the soy-fortified bread, was made and distributed at 95 won only to those four test areas where the soy-fortified bread was sold at 95 won. Ordinarily, the regular bread has flat top, and the half-weight size has poor appearance, so that such modification of half-weight regular bread was assumed to have much better promotional values. In other words, the test was intended to measure the sales reaction between the soy-fortified bread and the newly marketed half-weight regular bread with identical appearance.

Based on the data provided through a series of consumer taste tests of the soy-fortified bread which were conducted by the Sam Lip, and based on the improvements made by the company, the company executives had reasonably good confidence upon the quality of the bread as

acceptable to most bread users.²

Promotional Plans : Because of the costs and the effectiveness of promoting the soy-fortified bread in limited test stores, no mass media advertising was used during the test marketing of the bread. However, as it is presented in Figure III-2, through III-5 the point of purchase materials were provided by the company and distributed to the retailers concerned.

The material in Figure III-2 is a kind of poster which was distributed and posted at each store to promote the sales of the soy-fortified bread. Depending on the size and the condition of each retail store either smaller poster (7 1/2" x 10 1/2") or larger one (15" x 22") was distributed. In most cases both larger and smaller posters were distributed to get extra attention from bread users.

The smaller poster was usually posted on the store display window or on the glass of a store door. As shown in Figure III-3 informative as well as promotional messages about the soy-fortified bread is described in detail. The main contents of the messages may be summarized in the following Table III-3.

² See the Sam Lip Co., report on the technical aspects of the quality of soy-fortified bread.

Figure III-2. Design of the Promotional Poster



- ① 식빵이라고 다같은 것은 아닙니다.
- ② 맛과 영양이 뛰어난 고급식빵입니다.
- ③ 발육기의 어린이에게 특히 필요합니다.

삼립식품공업주식회사

맛과 영양이 생명입니다
삼립 고단백식빵

Figure III-2 continued

Translation of Figure III-2

Sam Lip Bread

Plenty of Nutrition in the Same Size

P I C T U R E

- | | |
|---|---|
| 1. Bread is not all Alike; | Value of Bread is Determined by Taste and Nutrition |
| 2. High Quality Bread with good Taste and High Nutrition. | |
| 3. Vitally Needed for Growing Child. | Sam Lip High Protein Bread |

Figure III-3. Description of the Poster

—삼립가족께 드리는 희소식—

●삼립식품이 정성어린 새제품을 내놓았습니다●

삼립식품 기술진이 3년간의 연구 끝에 개발한 삼립고단백 식빵은 "식탁의 혁명"이라고 불릴 만큼 맛과 영양면에서 다른 제품이 따를 수 없는 정성의 결정품입니다.

미국농무성의 기술원조에 힘입어 개발된 이 식빵은 앞으로 건강한국을 위한 체질개선에 크게 기여할 것입니다.

●식빵이라고 해서 단백질이 많지는 않다●

식빵은 겉모양은 비슷하지만 영양기능은 모두 다릅니다. 삼립고단백 식빵은 같은 크기라도 고체에 필수적인 고단위의 필수 영양(특히 단백질) 함유량을 크게 강화함으로써 소화기능, 단백질량을 다른 식빵에 비해 2배이상으로 높였습니다.

●발육기의 어린이에게 특히 중요합니다●

삼립고단백 식빵은 사람에게 필수적인 단백질을 강화하였을 뿐만 아니라 특히 우리나라 어린이들이 부족한 칼슘과 비타민 B₂를 다른 식빵보다 몇배나 강화한 영양식빵으로서 높은 단백질 효과와 더불어 발육기의 어린이에게 특히 좋습니다.

그러나 가격은 시중의 고급식빵보다 저렴한 것이 특징입니다.

학술적으로 단백질가(protein score), 즉 단백질 이용가능도에 있어서 일반식빵은 47이므로 일반식빵에 함유된 단백질량 8.5% 중 실제 이용가능한 단백질량은 겨우 3.9%인데 비해 삼립고단백 식빵은 단백질가가 77(과학기술연구소 실험결과)이어서 단백질 함유량 10.5%를 기준으로 할때 실제 이용가능한 단백질량은 8.1%나 되어 다른 식빵보다 2배이상 가는 이용가능한 단백질량을 보여주고 있습니다.

●영양비교표●

(100g 당)

성분	단위	삼립고단백식빵		일반식빵	
		함유량	이용가능량	함유량	이용가능량
단백질	gr	10.5	8.1	8.3	3.9
칼슘	mg	26.8		12.4	
비타민A	I.U.	1,200		--	
비타민B ₂	mg	0.35		0.05	

Table III-3. Summary of the Poster Messages

-
- (1) The soy-fortified bread is the distinctive and newly developed nutritious bread. It is developed by the Sam Lip with technical assistance of U.S.D.A. experts, and will serve to improve the physical condition of many Korean.
 - (2) Bread has not always same quality. It looks all alike, but the soy-fortified bread has many more and additional valuable nutrition than other bread.
 - (3) Especially the soy-fortified bread is vitally needed to a growing child. The bread is enriched with good quality of protein and vitamins which are largely insufficient to Korean children.
 - (4) The comparison of nutrition between the soy-fortified bread and ordinary bread is presented in a table.
-

Such promotional messages itself is well written, but because of the nature of the poster and the way it is utilized in the retail stores, the effectiveness of the messages as a means of promotion seems to be reduced significantly.

In addition to the posters the small descriptive handout material was provided by the Sam Lip to the retailers for further information to bread buyers. It is shown in Figure III-4. The handout material was often

Figure III-4. Emotional Leaflet



식빵의 새로운 시대가 열렸습니다.

USAID와 삼립식품 연구진이 공동 개발한 고단백식빵은 단백질, 비타민, 칼슘이 강화된 착기작인 영양식빵입니다.

- 삼립식품만이 생산하는 고단백식빵은 인체내의 단백질합성에 필요한 라이신을 강화 하므로써 일반식빵에 비해 2배이상의 단백질 합성효과를 나타냅니다.
- 동물실험결과 7배의 빠른 성장을 나타냈습니다.

일반식빵	10.5
고단백식빵	24.45

● 영양비교표

영양성분	단위	일반식빵	고단백식빵
단백질	g/100g	10.5	24.45
칼슘	mg/100g	40	24.45
비타민A	μg/100g	3.100	-
비타민B ₁	mg/100g	2.37	2.37
비타민B ₂	mg/100g	0.37	0.06
철	mg/100g	0.21	0.21

※ 고단백식빵은 토스트를 해서 드시면 그 맛이 더욱 고소합니다.
 항상 이용해 주신데 대해 감사드리며 폐기비용에 대한 고전을 회정합니다.
 전화기: 영업부 02-3961-7

삼립 **고단백식빵**

삼립식품공업주식회사

서울 영등포구 영등동 116-2 2층 3961-7

given to bread buyers with a free sample packet of four slices of the soy-fortified bread. The message of the handout is very much the same as that included on the back side of the smaller poster mentioned above.

The distribution of free samples was planned, and it was distributed to all the retail stores which were expected to carry the soy-fortified bread. Averaging more than one hundred sample packets were given to each store during the first week of the test sales period. And another one hundred or more of the samples depending on the request of an individual store were distributed through the salesmen of the Sam Lip dealers.

Also, a small descriptive leaflet was inserted in each package of the soy-fortified bread. It is shown in Figure III-5. It is expected to reenforce the nutritional value of the bread by the buyers. As in the case of the handout the leaflet consists of a description of the bread values in terms of nutrition, and the comparison of the soy-fortified bread with the ordinary bread sold in market. In particular the leaflet recommends to serve the bread as toast, because it would certainly reduce the poor odor of the bread.

With the completion of required preparation for the

Figure III-5. Promotional Insert in the Bread Package



같은 크기에도 풍부한 영양이 농축된

삼립고단백식빵

겉모양은 비슷하여도 영양상태는 모두가 다릅니다. 삼립고단백 식빵은 같은 크기에도 고단위 영양이 농축되어 있습니다.

삼립 고단백 식빵은 USAID의 기술 지원으로 삼립식품이 개발한 맛과 영양이 뛰어난 고단 식빵으로 단백질, 비타민, 칼슘등이 강화되어 있습니다.

국내에서 삼립식품만이 생산하는 고단백 식빵은 전체내의 단백질 함량에 필요한 라이신을 강화하고 특히 우리나라 사람들에게 부족한 칼슘과 비타민 B₁의 경우 다른 식빵에 비하여 2배 이상의 영양이 강화되어 있습니다.

삼립 고단백 식빵은 일반 식빵에 비하여 70%나 높은 단백질 함량 효과를 나타내게 되어 병육기의 어린이들에게는 특히 좋습니다.

그러나 값은 시중 영양식빵보다는 저렴한 것이 또한 특징입니다.

● 영양비교표

100g당

성분	단위	고단백식빵	일반식빵
단백질	gr	10.5	8.3
칼슘	mg	26.8	12.4
비타민 A	I.U.	1,200	-
비타민 B ₁	mg	0.16	0.15
비타민 B ₂	mg	0.35	0.05

고단백 식빵은 토스트용 해서 드시면 그 맛이 더욱 고소합니다.

삼립식품의 제품을 애용해 주신데 대하여 감사드리며 폐사의 제품에 대한 고려를 환영합니다.

인원서 : 영검부 68-3961-7



삼립식품공업주식회사

서울·영등포구 가림동 4167·268-3961-7

test marketing process of the soy-fortified bread, the Sam Lip finally launched a test sales on July 8th and it lasted to the end of August 1976. Actual sales made during the test marketing period is presented in the following.

1-2. Bread Sales during the Test Period

An analysis of the test bread sales by area is made through the data available in the daily sales reports which were initially provided by the individual bread salesmen and compiled at each designated dealer in the test areas. The analysis by period is also made by dividing the test period into two, i.e., during July (24 days) and August (27 days), which seems to have experienced many different problems in the process of the test sales.

Bread Sales by Area : During the first few weeks of the test sales period substantial confusion was found throughout the channels of distribution. Due to unfamiliar attempt of the test marketing of the soy-fortified bread, to a certain extent it applies to all interest groups, including the staffs of the Sam Lip, the dealers, the salesmen of the dealers as well as of the company, the latter usually sold bread directly to larger retailers, and the store keepers who were supposed to handle

this new bread, had experienced confusion of one kind or another during the first couple weeks.

Moreover, such discriminatory distribution of the soy-fortified bread to a limited number of stores had resulted in some considerable confusion and problems among the bread salesmen and between the salesmen and the store keepers. For example, one store was prearranged to sell the soy-fortified bread, but the next one did not, so the latter naturally protested it to the salesman. However, such confusions and protests were eventually quieted down people as realized the purpose of the test sales.

Wide difference and fluctuation of the sales of the soy-fortified bread was observed in different test areas. Naturally, as it was expected, considerable difference in the sales was observed by the different pricing of the bread.

After a few weeks of the sales of the test bread, namely, during August, still wide difference of the sales of the bread by area was observed, It was expected to maintain the sales to a certain level in each area depending on the price level and the promotional efforts of the dealers and the salesmen who had direct contact with the retailers. However, the result was rather disappointing one, especially, in those highly priced areas of 180 won

and 140 won the sales of the soy-fortified bread dropped drastically to almost zero in this period.

As it is shown in Table III-4 and III-5 the sales of the soy-fortified bread amounted to 4,617 loaves for the period from July 8 to July 31, averaging 192 loaves per day and 2.4 loaves per store day. However, the figures dropped substantially to 3,159 during the second period of August 1 to August 27, averaging 117 loaves per day and 1.4 loaves per store day. Such decline of sales could be explained by the drastic drop of sales in the areas where relatively higher prices of 140 or 180 won for a loaf were charged.

In the table "N.R." and "S.M." stand for neighborhood foods store and self-service supermarket respectively. In order to make the tables more orderly ones such abbreviations are used whenever needed in the subsequent tables of the sales data.

At any rate during the test period the soy-fortified bread was not sold more than 20 per cent of total bread supplied by the Sam Lip and sold through the test stores. Only 18 per cent of sales was made during the July, and it happened to be the largest proportion of sales made with the soy-fortified bread throughout the study period covered in this report. However, when individual test

Table III-4. Analysis of Bread Sales by Selected Test Area (During July 8-31)

(Unit : loaf)

	<u>Soy-forti- fied bread</u> (450 gr.)	<u>Regular bread</u> (800 gr.)	<u>regular bread¹</u> (400 gr.)	<u>Milk bread²</u> (450 gr.)	<u>Total</u>
<u>Group I</u>					
Unit price	₩ 95	₩190	₩ 95	₩200	
Suyuri					
N.R ⁴	1,675(58)	258(9)	5(0)	935(33)	2,873(11)
S.M ⁵	135(8)	335(20)	255(15)	987(58)	1,712(7)
Wangshipri	729(21)	814(23)	5(0)	2,006(56)	3,554(14)
Youido	317(11)	427(14)	127(4)	2,135(71)	3,006(12)
Dongkyodong					
N.R	92(11)	300(37)	14(2)	415(51)	821(3)
S.M	190(25)	255(34)	0(0)	316(42)	761(3)
Sub-total	3,138(25) (68)	2,389(19) (58)	406(3) (26)	6,794(53) (43)	12,727(49)
<u>Group II</u>					
Unit price	₩140	₩190	₩ 95	₩200	
Sungdong					
N.R	180(9)	328(16)	112(5)	1,450(70)	2,070(8)
S.M	160(16)	189(19)	31(3)	614(62)	994(4)
Jangwidong					
N.R	363(17)	236(11)	98(5)	1,444(67)	2,141(8)
S.M	134(14)	241(24)	10(1)	608(61)	993(4)
Sub-total	837(14) (18)	994(16) (24)	251(4) (16)	4,116(66) (26)	6,198(24)
<u>Group III</u>					
Unit price	₩180	₩190	₩ 95	₩200	
Moraena	355(8)	344(8)	415(10)	3,215(74)	4,329(17)
Banpo					
N.R	217(12)	174(9)	266(14)	1,193(65)	1,850(7)
S.M	70(9)	188(23)	221(28)	325(40)	804(3)
Sub-total	642(9) (14)	706(10) (17)	902(13) (58)	4,733(68) (30)	6,983(27)
Total	4,617(18)	4,089(16)	1,559(6)	15,643(60)	25,908(100)

¹ The actual sales volume are divided by two to come up equivalent size of regular bread

² Includes the sales of one half size of milk bread dividing the volume by two

³ In the areas where the soy-fortified bread was priced at 95 won specially packaged "regular" bread (450 grams) was marketed and classified under 400 grams of regular bread.

⁴ N.R. stands for neighborhood foods retail store

⁵ S.M. stands for self-service supermarket

Table III-5. Analysis of Bread Sales by Selected Test Area
(During August 1-27)

(Unit : loaf)

	<u>Soy-forti-</u> <u>fied bread</u> (450 gr.)	<u>Regular</u> <u>bread</u> (800 gr.)	<u>Regular</u> <u>bread</u> (400 gr.)	<u>Milk</u> <u>bread</u> (450 gr.)	<u>Total</u>
<u>Group I</u>					
Unit price	₩ 95	₩190	₩ 95	₩200	
Suyuri					
N.R	970(29)	348(11)	144(4)	1,833(56)	3,295(13)
S.M	178(13)	412(31)	56(4)	707(52)	1,353(5)
Wangshipri	1,016(30)	607(18)	122(4)	1,679(49)	3,424(14)
Youido	388(10)	450(12)	0(0)	3,003(78)	3,841(15)
Dongkyodong					
N.R	292(15)	261(13)	196(10)	1,216(62)	1,965(8)
S.M	166(24)	244(35)	0(0)	292(42)	702(3)
Sub-total	<u>3,010(21)</u> (95)	<u>2,322(16)</u> (54)	<u>518(4)</u> (36)	<u>8,730(60)</u> (53)	<u>14,580(58)</u>
<u>Group II</u>					
Unit price	₩140	₩190	₩ 95	₩200	
Sungdong					
N.R	90(7)	135(10)	126(9)	1,028(75)	1,379(5)
S.M	0(0)	312(3)	120(10)	726(63)	1,158(5)
Jangwidong					
N.R	50(4)	127(9)	2(0)	1,183(87)	1,362(5)
S.M	0(0)	305(33)	45(5)	577(62)	927(4)
Sub-total	<u>140(3)</u> (4)	<u>879(18)</u> (21)	<u>293(6)</u> (20)	<u>3,514(62)</u> (21)	<u>4,826(19)</u>
<u>Group III</u>					
Unit price	₩180	₩190	₩ 95	₩200	
Mcraenae	9(0)	591(16)	392(11)	2,759(74)	3,751(15)
Banpo					
N.R	0(0)	263(19)	29(2)	1,088(79)	1,380(6)
S.M	0(0)	219(28)	218(28)	339(44)	776(3)
Sub-total	<u>9(0)</u> (0)	<u>1,073(18)</u> (25)	<u>639(11)</u> (44)	<u>4,186(71)</u> (26)	<u>5,907(23)</u>
Total	3,159(13)	4,274(17)	1,450(6)	16,430(65)	25,313(100)

area was examined there are several dealers who sold more than 20 per cent in one or both periods covered in this section.

In the areas where the lowest price was charged (95 won for a loaf) the proportion of the soy-fortified bread sales to the sales of the other bread exceeds more than 20 per cent. Particularly, in Suyuri and Wangshipri the proportions of the soy-fortified bread sales to other bread sales were much higher than any other areas including other areas where the same price were charged.

Depending on the location some variance of bread market share of the Sam Lip could be found. However, those areas that assigned to conduct the test marketing possessed a more effective marketing ability among competitors. Since each sample store was selected on the basis of the past bread sales, they were expected to sell a certain amount of bread daily regardless of the location and the size of a store.

However, the bread sales data presented in Table III-4 and III-5 leads some plausible conclusion. That is, the sales of the soy-fortified bread seems to depended heavily on the effort of the Sam Lip dealers who control their salesmen. Also there is strong indication that the bread sales normally depends on the ability of salesmen who

actually deliver and sell the bread to his customers.

Such test areas as Suyuri and Banpo were able to sell the bread much more than the other areas where the same price was charged. Particularly, Banpo had been chosen to charge highest price for the bread, but the dealer was able to sell 12 per cent of the total bread sold in the area during the month of July, but none in August.

As it is shown in the Table III-4 and III-5 even in the areas where the same price for a loaf of the soy-fortified bread was charged, the proportion of the soy-fortified bread sales to the sales of other bread also fluctuate widely. During July in the areas where 95 won, the cheapest price, was charged the per centage of bread sales range from 11 per cent in both Youido and Dongkyodong to 58 per cent in Suyuri. During the month of August the difference is somewhat narrowed, but still wide difference is observed.

In those areas where higher prices were charged, it is natural to assume that the dealers of the Sam Lip and their salesmen lost their interest to sell the soy-fortified bread immediately after its introduction to the market. Such interpretation can be justified by the close examination of the sales data in Table III-4 and III-5.

Also interesting fact is found in Table III-4 and III-5.

As it was mentioned in previous section, the areas where the soy-fortified bread was priced at 95 won specially packaged "regular" bread of 450 grams was provided in addition, but curiously the resulting sales is found as insignificant in the tables.

Moreover, in proportion to the total bread sales the sales of the soy-fortified bread is found as lowest in Group III (180 won) areas. There is no plausible explanation for that, except the salesmen and the retailers did not actively promote such special bonus bread to their customers. In some cases it is assumed that often such special bread was not delivered to the test retail stores, because some salesmen did not pay much attention to the bread and the margin for a loaf of that special bread was so small anyway.

The tables III-6 through III-9 are presented to show any difference in the sales of the soy-fortified bread between the selected neighborhood retail stores (N.R.) and the sample supermarkets (S.M.), No marked difference is shown on the sales of the soy-fortified bread for Group II and III during the test period, but for Group I the trend of the sales shows somewhat opposite. In other words, for the neighborhood retail stores the sales seems declining in August, but for the supermarkets the sales seems

Table III-6. Analysis of Bread Sales by Area at Selected Neighborhood Retail Store (During July 8-31)

(Unit : loaf)

	<u>Soy-forti- fied bread</u> (450 gr.)	<u>Regular bread</u> (800 gr.)	<u>Regular bread¹</u> (400 gr.)	<u>Milk bread²</u> (450 gr.)	<u>Total</u>
<u>Group I</u>					
Unit price	₩ 95	₩190	₩ 95	₩200	
Suyuri	1,675(58)	258(9)	5(0)	935(33)	2,873(14)
Wangshipri	729(21)	814(23)	5(0)	2,006(56)	3,554(17)
Youido	317(11)	427(14)	127(4)	2,135(71)	3,006(15)
Dongkyodong	92(11)	300(37)	14(2)	415(51)	821(4)
Sub-total	2,813(28) (72)	1,799(18) (62)	151(2) (15)	5,491(54) (43)	10,254(50)
<u>Group II</u>					
Unit price	₩140	₩190	₩ 95	₩200	
Sungdong	180(9)	328(16)	112(5)	1,450(70)	2,070(10)
Jangwidong	363(17)	236(11)	98(5)	1,444(67)	2,141(10)
Sub-total	543(13) (14)	564(13) (20)	210(50) (20)	2,894(69) (23)	4,211(20)
<u>Group III</u>					
Unit price	₩180	₩190	₩ 95	₩200	
Moraenae	355(8)	344(8)	415(10)	3,215(74)	4,329(21)
Banpo	217(12)	174(9)	266(14)	1,193(65)	1,850(9)
Sub-total	572(11) (14)	518(8) (18)	681(11) (65)	4,408(71) (34)	6,179(30)
Total	3,928(19)	2,881(14)	1,042(5)	12,793(62)	20,644(100)

¹ The actual sales volume are divided by two to come up equivalent size of regular bread

² Includes the sales of one half size of milk bread dividing the volume by two

Table III-7. Analysis of Bread Sales by Area at Selected Neighborhood Retail Store (During August 1-27)

(Unit : loaf)

	<u>Soy-forti- fied bread</u> (450 gr.)	<u>Regular bread</u> (800 gr.)	<u>Regular bread¹</u> (400 gr.)	<u>Milk bread²</u> (450 gr.)	<u>Total</u>
<u>Group I</u>					
Unit price	₩ 95	₩190	₩ 95	₩200	
Suyuri	970(29)	348(11)	144(4)	1,833(56)	3,295(16)
Wangshipri	1,016(30)	607(18)	122(4)	1,679(49)	3,424(17)
Youido	388(10)	450(12)	0(0)	3,003(78)	3,841(19)
Dongkyodong	292(15)	261(13)	196(10)	1,216(62)	1,965(10)
Sub-total	2,666(21) (95)	1,606(13) (60)	462(4) (46)	7,731(62) (56)	12,525(61)
<u>Group II</u>					
Unit price	₩140	₩190	₩ 95	₩200	
Sungdong	90(7)	135(10)	126(9)	1,028(75)	1,379(7)
Jangwidong	50(4)	127(9)	2(0)	1,183(87)	1,362(7)
Sub-total	140(5) (5)	262(10) (9)	128(5) (13)	2,211(81) (16)	2,741(14)
<u>Group III</u>					
Unit price	₩180	₩190	₩ 95	₩200	
Moraena	9(0)	591(16)	392(11)	2,759(74)	3,751(18)
Banpo	0(0)	263(19)	29(2)	1,088(79)	1,380(7)
Sub-total	9(0) (0)	854(17) (31)	421(8) (41)	3,847(75) (28)	5,131(25)
Total	2,815(14)	2,782(14)	1,011(5)	13,789(68)	20,397(100)

¹ The actual sales volume are divided by two to come up equivalent size of regular bread

² Includes the sales of one half size of milk bread dividing the volume by two

Table III-8. Analysis of Bread Sales by Area at Selected Supermarket (During July 8-31)

(Unit : loaf)

	<u>Soy-forti- fied bread</u> (450 gr.)	<u>Regular bread</u> (800 gr.)	<u>Regular bread¹</u> (400 gr.)	<u>Milk bread²</u> (450 gr.)	<u>Total</u>
<u>Group I</u>					
Unit price	₩ 95	₩190	₩ 95	₩200	
Suyuri	135(8)	335(20)	255(15)	987(58)	1,712(33)
Dongkyodong	<u>190(25)</u>	<u>255(34)</u>	<u>0(0)</u>	<u>316(42)</u>	<u>761(15)</u>
Sub-total	325(13) (47)	590(24) (49)	255(10) (49)	1,303(53) (46)	2,473(47)
<u>Group II</u>					
Unit price	₩140	₩190	₩ 95	₩200	
Sungdong	160(16)	189(19)	31(3)	614(62)	994(19)
Jangwidong	<u>134(14)</u>	<u>241(24)</u>	<u>10(1)</u>	<u>608(61)</u>	<u>993(19)</u>
Sub-total	294(15) (43)	430(22) (35)	41(2) (8)	1,222(62) (43)	1,987(38)
<u>Group III</u>					
Unit price	₩180	₩190	₩ 95	₩200	
Banpo	<u>70(9)</u>	<u>188(23)</u>	<u>221(28)</u>	<u>325(40)</u>	<u>804(15)</u>
	(10)	(16)	(43)	(11)	
Total	689(13)	1,208(23)	517(10)	2,850(54)	5,264(100)

¹ The actual sales volume are divided by two to come up equivalent size of regular bread

² Includes the sales of one half size of milk bread dividing the volume by two

Table III-9. Analysis of Bread Sales by Area at Selected Supermarket (During August 1-27)

(Unit : loaf)

	<u>Soy-forti-</u> <u>ed bread</u> (450 gr.)	<u>Regular</u> <u>bread</u> (800 gr.)	<u>Regular</u> <u>bread</u> ¹ (400 gr.)	<u>Milk</u> <u>bread</u> ² (450 gr.)	<u>Total</u>
<u>Group I</u>					
Unit price	₩95	₩190	₩ 95	₩200	
Suyuri	178(13)	412(31)	56(4)	707(52)	1,353(20)
Dongkyodong	<u>166(24)</u>	<u>244(35)</u>	<u>0(0)</u>	<u>292(42)</u>	<u>702(19)</u>
Sub-total	344(17) (100)	656(32) (44)	56(3) (13)	999(49) (38)	2,055(14)
<u>Group II</u>					
Unit price	₩140	₩190	₩ 95	₩200	
Sungdong	0(0)	312(3)	120(10)	726(63)	1,158(24)
Jangwidong	<u>0(0)</u>	<u>305(33)</u>	<u>45(5)</u>	<u>577(62)</u>	<u>927(19)</u>
Sub-total	0(0) (0)	617(30) (41)	165(8) (37)	1,303(63) (49)	2,085(43)
<u>Group III</u>					
Unit price	₩180	₩190	₩ 95	₩200	
Banpo	<u>0(0)</u> (0)	<u>219(28)</u> (15)	<u>218(28)</u> (50)	<u>339(44)</u> (13)	<u>776(16)</u>
Total	344(7)	1,492(30)	439(9)	2,641(54)	4,916(100)

¹ The actual sales volume are divided by two to come up equivalent size of regular bread

² Includes the sales of one half size of milk bread dividing the volume by two

increasing. In other words, at lower price level the sales of the soy-fortified bread at supermarkets could be maintained to some extent as the product characteristics was known gradually to the bread buyers.

In these tables also such wide difference in sales is found by area and, in turn, by the individual store, which implies the role of the dealers and the salesmen to promote the soy-fortified bread.

Analysis of Sales by Stores : As Table III-10 and III-11 show the daily sales of the soy-fortified bread in each store indicates very small. Excluding bread sales at supermarkets daily sales figures of bread at regular retail store has wide range depending on the area it belongs. However, on the average a store was expected to sell more than ten loaves of bread a day. It implies that without serious effort was paid to sell the soy-fortified bread, it is obvious that the interest of buying and selling the bread was easily lost by the consumers as well as by the storekeepers. Particularly, in larger stores usually other brand of bread was handled along with the Sam Lip bread, so that it was fortunate to survive the soy-fortified bread at retail stores under such intense competition without placing vigorous promotional efforts of the producers to the dealers, to the salesmen,

Table III-10. Bread Sales per Store-Day by Area
(During July 8-31)

(Unit : loaf)

Number of store days	Sales per Store-Day				Total	
	Soy bread (450 gr.)	Regular bread (800 gr.)	Regular bread (400 gr.)	Milk bread (450 gr.)		
<u>Group I</u>						
Unit price	₩ 95	₩190	₩ 95	₩200		
Suyuri						
N.R	184	9.1	1.4	0.0	5.1	15.6
S.M	42	3.2	8.0	6.1	23.5	40.8
Wangshipri	260	2.8	3.1	0.0	7.7	13.7
Youido	230	1.4	1.9	0.6	9.3	13.1
Dongkyodong						
N.R	184	0.5	1.6	0.1	2.6	4.5
S.M	48	4.0	5.3	0.0	6.6	15.9
Sub-average		3.3	2.5	0.4	7.2	13.4
<u>Group II</u>						
Unit price	₩140	₩190	₩ 95	₩200		
Sungdong						
N.R	200	0.9	1.6	0.6	7.3	10.4
S.M	35	4.6	5.4	0.9	17.5	28.4
Jangwidong						
N.R	184	2.0	1.3	0.5	7.8	11.6
S.M	46	2.9	5.2	0.2	13.2	21.6
Sub-average		1.8	2.1	0.5	8.9	13.3
<u>Group III</u>						
Unit price	₩180	₩190	₩ 95	₩200		
Moraenae						
Banpo	240	1.5	1.4	1.4	13.4	18.0
N.R						
N.R	240	0.9	0.7	1.1	5.0	7.7
S.M	46	1.5	4.1	4.8	7.1	17.5
Sub-average		1.2	1.3	1.7	9.0	13.3
Average		2.4	2.1	0.8	8.1	13.4

Table III-11. Bread Sales per Store-Day by Area
(During August 1-27)

(Unit : loaf)

	Number of store days	Sales per Store-Day				Total
		Soy bread (450 gr.)	Regular bread (800 gr.)	Regular bread (400 gr.)	Milk bread (450 gr.)	
<u>Group I</u>						
Unit price		₩ 95	₩190	₩ 95	₩200	
Suyuri						
N.R	216	4.5	1.6	0.7	8.5	15.3
S.M	54	3.3	7.6	1.0	13.1	25.1
Wangshipri	270	3.8	2.2	0.5	6.2	12.7
Youido	270	1.4	1.7	0.0	11.1	14.2
Dongkyodong						
N.R	216	1.4	1.2	0.9	5.6	9.1
S.M	54	3.1	4.5	0.0	5.4	13.0
Sub-average		2.8	2.2	0.5	8.1	13.5
<u>Group II</u>						
Unit price		₩140	₩190	₩ 95	₩200	
Sungdong						
N.R	270	0.3	0.5	0.5	3.8	5.1
S.M	54	0.0	5.8	2.2	13.4	21.4
Jangwidong						
N.R	216	0.2	0.6	0.0	5.5	6.3
S.M	54	0.0	5.6	0.8	10.7	17.2
Sub-average		0.2	1.5	0.5	5.9	8.1
<u>Group III</u>						
Unit price		₩180	₩190	₩ 95	₩200	
Moraenae	270	0.0	2.2	1.5	10.2	13.9
Banpo						
N.R	270	0.0	1.0	0.1	4.0	5.1
S.M	54	0.0	4.1	4.0	6.3	14.4
Sub-average		0.0	1.8	1.1	7.0	9.9
Average		1.4	1.9	0.6	7.2	11.2

to the storekeepers, and so on.

In some areas average daily sales of a retail store are below one loaf throughout the test periods covered. And even at supermarkets the daily sales of the bread are all below five loaves. This indicates that the sales of the bread was never reached to the satisfactory level of market penetration. Particularly, the soy-fortified bread was unable to replace the milk bread at retail stores during the test period. Instead, the soy-fortified bread can be placed as a good substitute for the regular bread, but not certainly be able to acquire popularity of the milk bread nor as a good substitute for the milk bread.

The table also indicates that the proportion of the sales of the milk bread isn't changed much over the period covered here. On the average each neighborhood retail store sells about five or six loaves of the Sam Lip milk bread a day, and each supermarket sells about ten loaves of the milk bread a day. However, there is no clear indication of the marked difference in the level of bread sales by area, so that each area seems to have reasonably balanced proportion of bread users.

Sales Ratios of the Bread by Area : As Table III-12 and III-13 shows the sales ratios of the soy-fortified bread against either "milk" or "regular" bread will serve to

Table III-12. Bread Sales Ratios by Area
(During July 8-31)

(Unit : per cent)

	<u>Soy/regular</u> <u>(800 gr.)</u>	<u>Soy/regular</u> <u>(400 gr.)</u>	<u>Soy/regular</u> <u>(450 gr.)</u>	<u>Soy as share</u> <u>of total</u>
<u>Group I</u>				
Suyuri				
N.R	649.2	33,500.0	179.1	58.3
S.M	40.3	52.9	13.7	7.9
Wangshipri	89.6	14,580.0	36.3	20.5
Youido	74.2	249.6	14.8	10.5
Dongkyodong				
N.R	30.7	657.1	22.2	11.2
S.M	<u>74.5</u>	<u>-</u>	<u>60.1</u>	<u>25.0</u>
Sub-average	131.4	772.9	46.2	24.7
<u>Group II</u>				
Sungdong				
N.R	54.9	160.7	12.4	8.7
S.M	84.7	516.1	26.1	16.1
Jangwidong				
N.R	153.8	370.4	25.1	17.0
S.M	<u>55.6</u>	<u>1,340.0</u>	<u>22.0</u>	<u>13.5</u>
Sub-average	84.2	333.5	20.3	13.5
<u>Group III</u>				
Moraenae	103.2	85.5	11.0	8.2
Banpo				
N.R	124.7	81.6	18.2	11.7
S.M	<u>37.2</u>	<u>31.7</u>	<u>21.5</u>	<u>8.7</u>
Sub-average	90.9	71.2	13.6	9.2
Average	112.9	296.2	29.5	17.8

Table III-13. Bread Sales Ratios by Area
(During August 1-27)

(Unit : per cent)

	<u>Soy/regular</u> <u>(300 gr.)</u>	<u>Soy/regular</u> <u>(400 gr.)</u>	<u>Soy/milk</u> <u>(450 gr.)</u>	<u>Soy as share</u> <u>of total</u>
<u>Group I</u>				
Suyuri				
N.R	278.7	673.6	52.9	29.4
S.M	43.2	317.9	25.2	13.2
Wangshipri	157.4	832.8	60.5	29.7
Youido	86.2	-	12.9	10.1
Dongkyodong				
N.R	111.9	149.0	24.0	14.9
S.M	<u>68.0</u>	<u>-</u>	<u>56.8</u>	<u>23.6</u>
Sub-average	129.6	581.1	34.5	20.6
<u>Group II</u>				
Sungdong				
N.R	66.7	71.4	8.8	6.5
S.M	0.0	0.0	0.0	0.0
Jangwidong				
N.R	39.4	2,500.0	4.2	3.7
S.M	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Sub-average	15.9	47.8	4.0	2.9
<u>Group III</u>				
Moraenae	1.5	2.3	0.3	0.2
Banpo				
N.R	0.0	0.0	0.0	0.0
S.M	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Sub-average	0.8	1.4	0.2	0.2
Average	73.9	217.9	19.2	12.5

conform the poor sales of the former during the test period. Other than a few areas most of the cases shows the soy-fortified bread sold less than the regular bread of the Sam Lip Company. Again the tables seem to imply that huge difference in sales ratios among the test areas is a good indication of the difference in the degree of promotional efforts put by the dealers, the salesmen, and the storekeepers.

1-3. Comments on the Test Marketing of the Soy-fortified Bread

In short, the sales records and it's analysis concerning the soy-fortified bread may lead a conclusion that the sales performance is rather disappointing one. Such disappointment might be explained in many ways, but it may be summarized as follows:

- (1) The lack of positive and enduring consumer acceptance upon the soy-fortified bread,
- (2) The lack of sufficient promotional materials to the consumers as well as to the retailers,
- (3) The lack of a special monetary incentive, which could be employed during the test sales period, to the dealers, to the salesmen of the Sam Lip products, and to the retailers,

- (4) Quality of the bread was also effected unfavorably upon the bread sales. Even though many consumers expressed their opinion as reasonably good one, the soy-fortified bread had some inherent defects, and the Sam Lip had been unable to improve it to acceptable level,
- (5) Strong preference upon the "milk" bread has been found among bread users. They usually take the bread on the basis of quality, not of price alone.
- (6) Because of the government permit on the price of bread, a fixed and regulated price was inevitably adopted, particularly, on "regular" bread, so that the company had little flexibility to manipulate in promoting the soy-fortified bread.

In particular, concerning the price reaction of the bread buyers the following comments will be made.

- (1) The price of the soy-fortified bread is found definitely too high, particularly, when it is priced at 180 won for a loaf of even 530 grams.
- (2) If the price of the soy-fortified bread was set at 140 won for a loaf, the success of the bread marketing may well depend on many other factors, such as promotional efforts, advertising, cooperation of the retailers, and so on.

(3) The price of 95 won for a loaf is considered as reasonable or even too low to promote the bread without placing much promotional efforts.

2. The Soy-fortified Bread Sales during Market-wide Distribution (November, 1976 to June, 1977)

2-1. Marketing Decisions Concerning Market-wide Distribution

This part of the report covers an statistical analysis of bread sales including the soy-fortified bread of Sam Lip Foods Co., Ltd. after November 1976, when the company finally decided to introduce the soy-fortified bread for market-wide distribution. With the data and the experience of the test marketing the company developed a new marketing program for the introduction of the bread and launched its sales through the company dealers.

In order to have meaningful data of the bread sales the analysis will be made by dividing the data into two parts, namely, the sales data which was gathered by the test stores that employed during the test marketing of the soy-fortified bread, and the sales data of all bread that distributed by the company. The latter covers complete seven months of the market-wide sales of the soy-fortified bread, yet, the former data will only covers

three months beginning December to February 1977, during the period the sales of the soy-fortified bread was fairly active.

The related marketing decisions for the market-wide distribution of the soy-fortified bread is presented in the following.

Pricing of the Soy-fortified Bread and Related Information : After many discussions among the company executives and the discussions with the market researcher of this project, the company finally set the retail price as 160 won for a loaf (530 grams). Even though the company could charge 180 won, based on the government permit given in June 1976, the final decision on the price of the soy-fortified bread was not easily made in the Sam Lip Company and had withheld until the last moment of the sales began.

Such decision was considered neither as ideal nor reasonable in view of the relative prices of other kinds of bread which were marketed by the company. Apparently the company executive did not wanted to charge as high as 180 won, because both previous research findings and test result clearly indicated that the soy-fortified bread could not compete effectively with the milk bread, if the same price was charged. Under such circumstance the

decision was made to cover the costs and some contribution to the company. In fact, the company decision was largely influenced by inflation and strict government price control. It normally last more than a year when the price is set, and normally the government do not accept considerable raise of bread price, even in case of the revision of the price controlled.

The company executives were well aware of the implication of the price decision, but because the company were already losing money by selling the regular bread for some time, the company did not wanted to bear additional burden through the introduction of the soy-fortified bread to the market.

The company requested very hard and was expecting new permit from the government to raise the price of regular bread in near future. The company hoped that, the company got a new government permit on bread price, eventually the price of the soy-fortified bread would become comparable to the price of the regular bread.

Such hope was partially realized in January 1977.

Table III-14 shows only 10 per cent of price raise was allowed by the government just only for the regular bread. Therefore, the price spread between the soy-fortified bread and the regular bread had been reduced to 55 from

65 won, which means the reduction of only 15 per cent of the price spread already existed.

Table III-14 also shows marketing spreads of bread that marketed by the Sam Lip. The spreads range from 23.8 per cent to 30.5 per cent of retail prices. The regular bread has the least margin and the milk bread has the largest margin. The margin of the soy-fortified bread is almost as high as for the milk bread, however, absolute amount of the difference per loaf is so small that the difference never become an effective incentive for the dealers as well as for the salesmen.

Table III-14. Bread Prices and Marketing Spreads
(Effective after Jan. 17, 1977)

(Unit : won)

	<u>Factory price</u>	<u>Dealer price</u>	<u>Salesman price</u>	<u>Retail price</u>
Regular Bread (800 gr.)	160.00 (76.2)	171.00 (81.4)	185.00 (88.1)	210.00 (100.0)
Regular Bread (400 gr.)	78.50 (74.8)	83.50 (79.5)	90.00 (85.7)	105.00 (100.0)
Milk Bread (450 gr.)	139.00 (69.5)	147.00 (73.5)	160.00 (80.0)	200.00 (100.0)
Milk Bread (200 gr.)	69.50 (69.5)	73.50 (73.5)	80.00 (80.0)	100.00 (100.0)
Soy-fortified Bread(450 gr.)	112.80 (70.5)	120.00 (75.0)	130.00 (81.3)	160.00 (100.0)

Product Decisions : Except minor technical improvement no marked improvement upon the quality of the soy-fortified bread was made until the final decision of marketing introduction was made. However, the company executives had a very difficult time to finalize the weight of the soy-fortified bread. As it is explained in previous section of the pricing, the company was well aware of the disadvantage by setting the price of 160 won for a loaf. Since the company did not want to charge any lower price, other product features, such as shape, color, order of the bread, were basically the same as before which had been produced for the test marketing.

No specially packed half-weight regular bread was produced at this stage, so that only the milk bread was sold to the market with similar shape, package and weight.

Unlike the time of introduction of the test sales of the soy-fortified bread it was evident that, the company executives had somewhat unsecure feeling about the future sales of the new bread. The other alternative was to increase the weight. To some extent the increase i.e., up to 700 grams for a loaf was considered as acceptable to the company. However, critical deterrent factor, namely, the unavailability of such odd size of cooking pans forced the company to go ahead with 530 grams. Again 450 grams was printed on the label.

Promotional Decisions : The same promotional materials, i.e., the posters, leaflet, and insert which had been employed for the test sales, were also used when the soy-fortified bread was introduced for market-wide distribution in November 1976. This time the company spent most of its available promotional expenses to radio advertisement. The contents of its message may be translated as Table III-15.

Table III-15. Radio Advertise Message

(Male)	Be healthy!	Be strong!
(Female)	Of course	Of course
(Male)	Do you know the high protein bread?	
(Female)		Of course
(Male)	New white bread	
(Male and Female)	High protein	High nutrition High protein white bread from the Sam Lip.

In addition to the radio advertising the company had planned to advertise the bread in several movie theatres and on monthly ladies' magazines. However, because of

the limitation of the costs involved, only the radio advertising was employed during the introductory period. In fact, the company had spent a large proportion of advertising budget for advertising the soy-fortified bread on television. Yet, it had been advertised during winter 1975, many months before the bread was introduced to the national market. Therefore, such untimely advertising on television had certainly little carry-over effect upon the sales of soy-fortified bread when it was actually sold at the market.

Radio advertising schedule and its costs are presented in the following Table III-16. The table shows that radio advertising expenses is awfully expensive, so, if ten per cent of the soy-fortified bread sales is allocated to radio advertising, the company should sell more than 10,000 loaves a day which is equivalent to three times of the highest sales made in December 1976. As it is shown in Table II-36 in Chapter II (p. 84), the Bread Survey V shows that the proportion of the radio advertising as a source of information and an awareness on the soy-fortified bread is only 16 per cent of all responses gathered in the table. It is a little higher than other items, such as promotional materials or a word of mouth advertising, yet, the figure is not impressive in view of the expenses paid for the advertising.

Table III-16: Radio Advertisement for the Soy-fortified Bread

Stations	Programs	Broadcast- ing Hours	Number of Days	Advertising Cost(Monthly) (Unit:Won)	Cost per Day (Unit:Won)
TBC-AM	Driving Around Street	08:35-09:30	7	₩ 660,000	₩22,000
	Korean Popular Song	14:30-15:00	7	266,000	9,000
DBS-AM	Health Guide	five times a day	7	1,805,000	60,000 (12,000) ¹
CBS-AM	Music Letters in Morning	09:35-10:00	7	140,000	5,000
MBC-AM TBC-FM	Spot 20"	six times a day	7	1,797,000	60,000 (10,000) ¹

¹ The figure in parentheses indicates the cost of commercial message-for twenty seconds.

2-2. Bread Sales during the Market-wide Distribution

Bread Sales of the Sam Lip : As it is mentioned in preceding section the soy-fortified bread was finally introduced to the market on November 22, 1976 through all the Sam Lip dealers of all cities including Seoul. Table III-17 presents monthly bread sales of the company, and the figures for November include only nine days of the sales. The data is provided by the company by the kind of bread that produced by the company. The table covers only eight months period between November 1976 to June 1977 during which the soy-fortified bread had been sold to all Sam Lip customers.

Table III-17 also includes the sales of the regular and milk bread other than the soy-fortified bread. The sales of the soy-fortified bread seems to decline steadily after the introduction of the bread. Not only the absolute sales amount of the bread declines in the first half of 1977, but the proportion of the sales to the other bread also declines. During the period, however, the total bread sales of the Sam Lip did increase steadily except January, so that the sales decline of the soy-fortified bread in the later period may be an indication of the weakened position of the soy-fortified bread in the market.

Table III-17. Monthly Bread Sales of Sam Lip

(In 1,000 loaves)

Month	Soy bread		Regular bread				Milk bread				Total	
	530 gr.		800 gr.		400 gr.		450 gr.		200 gr.		Sales	
	Sales	%	Sales	%	Sales	%	Sales	%	Sales	%	Sales	%
76												
Nov.*	43.3	14.2	71.6	23.6	17.9	5.9	74.4	24.5	96.7	31.8	303.9	3.8
Dec.	107.5	11.0	214.6	22.0	56.9	5.8	262.7	26.9	335.3	34.3	977.0	12.2
77												
Jan.	68.6	11.9	81.1	14.1	17.4	3.0	196.3	34.1	212.1	36.9	575.5	7.2
Feb.	85.4	9.0	145.4	15.3	25.9	2.7	330.1	34.8	363.3	38.2	950.1	11.8
Mar.	69.1	5.5	198.6	15.9	27.6	2.2	452.1	36.2	501.8	40.2	1,249.2	15.6
Apr.	46.3	3.7	196.1	15.6	25.3	2.0	451.5	35.9	538.4	42.8	1,257.6	15.7
May	15.1	1.2	205.7	16.0	22.7	1.8	475.4	37.0	565.3	44.0	1,284.2	16.0
Jun.	2.0	0.1	207.9	14.7	24.1	1.7	542.5	38.2	642.7	45.3	1,419.2	17.7
Total	437.3	5.5	1,321.0	16.5	217.8	2.7	2,785.0	34.7	3,255.6	40.6	8,016.7	100.0

* It covers only nine days (22nd through 30th)

Unfortunately, the table presents that the proportion of the sales of the soy-fortified bread never exceeds over 15 per cent of the total sales. Even the starting period of November 1976 the bread was sold only 14 per cent of the total bread sales made by the Sam Lip. Moreover, a serious and obvious fact is that the speed of the sales decline is shown as rather high.

Table III-18 presents the sales ratio of the soy-fortified bread to other bread produced by the Sam Lip. Except the half-size of the regular bread the sales ratio of the soy-fortified bread does not exceed more than 100 per cent, which means the sales of the soy-fortified bread never exceeds the sales of the regular or milk bread in quantity. Even in the first few months of the introduction of the bread, the data implies that the bread was unable to compete effectively with the popular bread of the Sam Lip, i.e., the regular or milk bread. The table also indicates that until February 1977 the relative sales position of the soy-fortified bread is reasonably well maintained, around 50 per cent of the regular bread and about 25 per cent of the milk bread. However, after March 1977 the proportion of the sales drops continuously and almost to a nil in June.

Table III-18. Monthly Bread Sales Ratios of Sam Lip

Month	<u>Soy/regular (800 gr.)</u>	<u>Soy/regular (400 gr.)</u>	<u>Soy/milk (450 gr.)</u>	<u>Soy/milk (200 gr.)</u>	<u>Soy as share of total</u>
76					
Nov.	60.5	241.9	58.2	44.8	14.2
Dec.	50.1	188.9	40.9	32.1	11.0
77					
Jan.	84.6	394.3	34.9	32.3	11.9
Feb.	58.7	329.7	25.9	23.5	9.0
Mar.	34.8	250.3	15.3	13.8	5.5
Apr.	23.6	183.0	10.3	8.6	3.7
May	7.3	66.5	3.2	2.7	1.2
Jun.	<u>1.0</u>	<u>8.3</u>	<u>0.4</u>	<u>0.3</u>	<u>0.1</u>
Average	33.1	200.8	15.7	13.4	5.5

Analysis of the Sales Made by the Sample Stores: In the following more detail sales analysis by selected area will be made. For a comparative analysis with the previous test sales data and for the convenience of gathering sales data, the same test areas and the sample retail foods stores including supermarkets were chosen, which had been used for the test marketing of the soy-fortified bread. And daily sales data for three months beginning December 1976 to February 1977 were collected through the Sam Lip sales organization.

Table III-19 to 21 present the monthly bread sales records of the 72 neighborhood retail foods stores beginning December 1976 to February 1977.³ As shown in these tables only a couple hundreds loaves of the soy-fortified bread were sold in some areas during the first month of the introduction, but in some other area more than 500 loaves were sold. On the average 300 loaves were sold in each area, so that only one loaf of the soy-fortified bread was sold a day in each store. In February the sales figures of the soy-fortified bread per store-day dropped substantially almost to two-thirds of a loaf.

³ Because the dealers discontinued the supply of the Sam Lip products. Two retail stores are eliminated from the list which were included previously in the test marketing of the soy-fortified bread.

Table III-19. Analysis of Bread Sales and Sales per Store-day by Area at Selected Neighborhood Retail Stores (During Dec. 1-31, 1976)

(Unit : loaf)

Unit price	Number of store-days	Soy-fortified bread		Regular bread		Regular bread		Milk bread		Total	
		Sales	Per day	Sales	Per day	Sales	Per day	Sales	Per day	Sales	Per day
		₩160		₩190		₩ 95		₩200			
Sungdong	248	183 (12)	0.7	228 (14)	0.9	3 (0)	0.0	1,157 (74)	4.7	1,581 (8)	6.4
Wangshipri	310	479 (18)	1.5	554 (21)	1.8	37 (1)	0.1	1,533 (59)	4.9	2,603 (13)	8.4
Suyuri	248	207 (10)	0.8	136 (6)	0.5	0 (0)	0.0	1,811 (84)	7.3	2,154 (11)	8.7
Jangwidong	248	158 (18)	0.6	35 (4)	0.1	43 (5)	0.2	661 (74)	2.7	897 (5)	3.6
Banpo	310	171 (13)	0.6	212 (16)	0.7	113 (9)	0.4	828 (63)	2.7	1,324 (7)	4.3
Youido	310	280 (5)	0.9	1,280 (23)	4.1	53 (1)	0.2	3,997 (71)	12.9	5,610 (28)	18.1
Dongkyodong	248	109 (5)	0.4	137 (7)	0.6	5 (0)	0.0	1,744 (87)	7.0	1,995 (10)	8.0
Mcraente	310	735 (2)	0.4	93 (2)	0.3	2 (0)	0.0	2,904 (78)	9.4	3,734 (19)	12.0
Total	2,232	2,322 (12)	1.1 ²	2,675 (13)	1.2 ²	256 (1)	0.1 ²	14,645 (74)	6.6 ²	19,898 (100)	8.9 ²

¹ Per day indicates sales per store-day.

² The figures indicate average sales per store-day in loaf.

Table III-20. Analysis of Bread Sales and Sales per Store-day by Area at Selected Neighborhood Retail Stores (During Jan. 1-31, 1977)

(Unit : loaf)

	Number of store- days	Scy-forti- fied bread		Regular bread		Regular bread		Milk bread		Total	
		Sales	Per ¹ day	Sales	Per day	Sales	Per day	Sales	Per day	Sales	Per day
Unit price		₩160		₩190		₩ 95		₩200			
Sungdong	248	194 (17)	0.8	46 (4)	0.2	0 (0)	0.0	889 (79)	3.6	1,129 (6)	4.6
Wangshipri	310	448 (20)	1.4	403 (18)	1.3	15 (1)	0.0	1,354 (61)	4.4	2,220 (12)	7.2
Suyuri	248	314 (15)	1.3	94 (4)	0.4	0 (0)	0.0	1,700 (81)	6.9	2,108 (11)	8.5
Jangwidoong	248	308 (19)	1.2	129 (8)	0.5	9 (1)	0.0	1,145 (72)	4.6	1,591 (8)	6.4
Banno	310	167 (18)	0.5	188 (21)	0.6	85 (9)	0.3	473 (52)	1.5	913 (5)	2.9
Youido	310	355 (7)	1.1	1,310 (27)	4.2	3 (0)	0.0	3,223 (66)	10.4	4,891 (26)	15.8
Dongkyedong	248	119 (7)	0.5	20 (1)	0.1	0 (0)	0.0	1,616 (92)	6.5	1,755 (9)	7.1
Koraense	310	679 (16)	2.2	115 (3)	0.4	27 (1)	0.1	3,400 (81)	11.0	4,221 (23)	13.6
Total	2,232	2,584 (14)	1.2	2,305 (12)	1.0	139 (1)	0.1	13,800 (73)	6.2	18,828 (100)	8.4

¹ Per day indicates sales per store-day.

² The figures indicate average sales per store-day in loaf.

Table III-21. Analysis of Bread Sales and Sales per Store-day by Area at Selected Neighborhood Retail Stores (During Feb. 1-28, 1977)

(Unit : loaf)

Unit price	Number of store-days	Soy-fortified bread		Regular bread		Regular bread		Milk bread		Total	
		Sales	Per ¹ day	Sales	Per day	Sales	Per day	Sales	Per day	Sales	Per day
		₩160		₩190		₩ 95		₩200			
Sungdong	224	128 (14)	0.6	39 (4)	0.2	0 (0)	-	747 (82)	3.3	914 (7)	4.1
Wangshipri	280	345 (18)	1.2	345 (18)	1.2	16 (1)	0.1	1,237 (64)	4.4	1,943 (14)	6.9
Suyuri	224	190 (11)	0.8	47 (3)	0.2	0 (0)	-	1,520 (86)	6.8	1,757 (13)	7.8
Jangwidong	224	187 (12)	0.8	93 (6)	0.4	1 (0)	-	1,337 (82)	6.0	1,618 (12)	7.2
Banno	280	204 (18)	0.7	209 (19)	0.7	8 (1)	-	689 (62)	2.5	1,110 (8)	4.0
Youido	280	55 (3)	0.2	470 (22)	1.7	8 (0)	-	1,583 (75)	5.7	2,116 (15)	7.6
Dongkyudong	224	44 (3)	0.2	31 (2)	0.1	0 (0)	-	1,586 (95)	7.1	1,661 (12)	7.4
Moraeone	280	154 (6)	0.6	61 (2)	0.2	5 (0)	-	2,423 (92)	8.7	2,643 (19)	9.4
Total	2,016	1,307 (10)	0.6 ²	1,295 (9)	0.6 ²	38 (0)	- ²	11,122 (81)	5.5 ²	13,762 (10)	6.8 ²

¹ Per day indicates sales per store-day.

² The figures indicate average sales per store-day in loaf.

During the three months period covered in these tables the proportion of the soy-fortified bread sales to the total bread sales in different areas are shown wide disparities ranging from 2 per cent to 20 per cent in some others. Such wide disparities are also found in the proportion of the regular bread (800 grams only) for which wider disparities are shown from one per cent to 27 per cent of the total bread sales.

Such wide ranges of disparities on the proportion of bread sales in different areas, and on the sales of the different kinds of the Sam Lip bread, can be explained partly by the income level of bread users in respective areas. Also, it might be explained by the level of promotional efforts that provided by the individual dealers concerned. For an example, because Moraenae area is known as one of the higher income area, it is reasonably assumed that the proportion of the soy-fortified bread sales should be lower than other lower income areas, such as Sungdong and Wangshipri, where more sales would be expected, if the bread is identified as nutritious, but lower quality and lower priced bread. However, as the table shows as during the early introductory period of the soy-fortified bread the proportion of the sales at Moraenae area can be classified as rather high, but the proportion drops substantially

in the later months. This implies that the dealer did not put enough promotional efforts to sell the soy-fortified bread after a couple months of its introduction.

In any case during the first three months of the introduction the proportion of the soy-fortified bread sales to the total bread sales does not exceed more than twelve per cent, and, on the average, the sales made at individual store do not exceed much more than one loaf per store-day. In some areas the soy-fortified bread are sold a little more than one loaf a day, but in some other areas only one-half loaf per store-day is sold.

On the other hand, the table presents that the milk bread is sold on the average six loaves per store-day. In some areas even more than ten loaves of the milk bread are sold per store-day. Therefore, unless additional promotional efforts had been provided by the dealers, an attempt of selling the soy-fortified bread as much as selling the milk bread would have resulted in vain.

Table III-22 shows that the proportion of the soy-fortified bread sales to the total bread sales of the Sam Lip in the period of market-wide distribution and in the period of the test market of the soy-fortified bread. The ratios shown in the left side, which represents the sales proportion in the test sales period.

Table III-22. The proportion of the Soy-fortified Bread Sales to the Total Bread Sales by Area at Selected Neighborhood Retail Stores¹

(Unit : per cent)

	<u>Period of the Test Sales</u>		<u>Period of Market-wide Distribution</u>		
	<u>July 1976</u>	<u>Aug. 1976</u>	<u>Dec. 1976</u>	<u>Jan. 1977</u>	<u>Feb. 1977</u>
<u>Group I (W 95)</u>			<u>(W160)</u>		
Suyuri	58	29	10	15	11
Wangshipri	21	30	18	20	18
Youido	11	10	5	7	3
Dongkyodong	11	15	5	7	3
<u>Group II (W140)</u>			<u>(W160)</u>		
Sungdong	9	7	12	17	14
Jangwidong	17	4	18	19	12
<u>Group III (W180)</u>			<u>(W160)</u>		
Moraenae	8	0	20	16	6
Banpo	12	0	13	18	18

¹ The figures are compiled with the data in Table III-4, 5, 19, 20, and 21 and indicate the proportion of soy-fortified bread sales to the total bread sales of the Sam Lip during the respective month.

show much faster decline of the sales between two different test sales periods presented in the table. Also, much wider disparities among the different areas are shown in that test period than the period of market-wide distribution.

On the other hand, the ratios shown in the right side, which represents the sales proportion of the soy-fortified bread in the initial period of the market-wide distribution, shows somewhat smoother decline of the sales as time goes. Also, the degree of disparities among different areas is shown as smaller in the right side than the one shown in the left side. During this period uniform price of 160 won was charged for a loaf of the soy-fortified bread, so that the trend of sales shown in the table may be, to some extent, an indication of indifferent attitude of bread buyers upon bread price. Otherwise, it may mean the presence of consumer awareness upon the bread as nutritious one. Furthermore, it may mean that the role of the dealers is critical to promote the bread, particularly, during a few months of introduction period.

Table III-23 presents the sales data for per store-day in selected areas. During the test sales period the table presents wide disparity even among the area where the same lower price was charged. However, during three months

Table III-23. The Soy-fortified Bread Sales per Store-day by Area at Selected Neighborhood Retail Stores¹

(Unit : in loaf)

	<u>Period of the Test Sales</u>		<u>Period of Market-wide Distribution</u>		
	<u>July 1976</u>	<u>Aug. 1976</u>	<u>Dec. 1976</u>	<u>Jan. 1977</u>	<u>Feb. 1977</u>
<u>Group I (W 95)</u>			<u>(W160)</u>		
Suyuri	9.1	4.5	0.8	1.3	0.8
Wangshipri	2.8	3.8	1.5	1.4	1.2
Youido	1.4	1.4	0.9	1.1	0.2
Dongkyodong	0.5	1.4	0.4	0.5	0.2
<u>Group II (W140)</u>			<u>(W160)</u>		
Sungdong	0.9	0.3	0.7	0.8	0.6
Jangwidong	2.0	0.2	0.6	1.2	0.8
<u>Group III (W180)</u>			<u>(W160)</u>		
Moraenae	1.5	0.0	0.4	2.2	0.6
Banpo	0.9	0.0	0.6	0.5	0.7

¹ The figures are compiled with the data in Table III-10, 11, 19, 20, and 21.

period of initial market-wide distribution the disparity among areas is substantially reduced. Also concerning the trend of sales between the period of test sales and the period of market-wide distribution, the former has more difference than the latter.

The table implies that the sales made in the period of market-wide distribution did not effectively get into bread buyer's hand, and also implies that the sales promotion was not effectively employed to be aware of the value of the soy-fortified bread.

A similar analysis is made for the sales of bread in supermarkets which were originally selected for the test sales of the soy-fortified bread. Since only ten supermarkets were chosen from five areas where such self-service stores are in operation, the figures presented in Table III-24 through III-26 may not be a good representation of bread sales in the areas concerned. Yet, the tables presents a few interesting facts concerning bread sales including the sales of soy-fortified bread.

First of all, among five areas two show that the sales of the soy-fortified bread are in increasing trend, two show up and down of the sales, and only one area shows drastic decline of the sales during three months period. These facts may imply that the soy-fortified bread had

Table III-24. Analysis of Bread Sales and Sales per Store-day by Area at Selected Supermarkets (During Dec. 1-31, 1976)

(Unit : loaf)

	Number of store-days	Soy-fortified bread		Regular bread		Regular bread		Milk bread		Total	
		Sales	Per ¹ day	Sales	Per day	Sales	Per day	Sales	Per day	Sales	Per day
Unit price		₩100		₩190		₩ 95		₩200			
Sungdong	62	254 (17)	4.1	482 (33)	7.8	29 (2)	0.5	717 (48)	11.6	1,482 (23)	23.9
Suyuri	62	261 (19)	4.2	341 (25)	5.5	3 (0)	0.1	754 (55)	12.2	1,359 (22)	21.9
Jangwidong	62	101 (10)	1.6	379 (4)	6.1	5 (1)	0.1	471 (49)	7.6	956 (15)	15.4
Banpo	62	349 (27)	5.6	345 (27)	5.6	100 (8)	1.6	496 (38)	8.0	1,290 (20)	20.8
Dongkyodong	62	218 (48)	3.5	450 (37)	7.3	3 (0)	0.1	553 (45)	8.9	1,224 (19)	19.7
Total	310	1,183 (19)	3.82	1,997 (32)	6.42	140 (2)	0.5 ²	2,991 (47)	9.6 ²	6,311 (100)	20.4 ²

¹ Per day indicates sales per store-day.

² The figures indicate average sales per store-day in loaf.

- 145 -

Table III-25. Analysis of Bread Sales and Sales per Store-day by Area at Selected Supermarkets (During Jan. 1-31, 1977)

(Unit : loaf)

Unit price	Number of store-days	Soy-fortified bread		Regular bread		Regular bread		Milk bread		Total	
		Sales	Per ¹ day	Sales	Per day	Sales	Per day	Sales	Per day	Sales	Per day
		₩160		₩190		₩ 95		₩200			
Sungdong	62	165 (11)	2.7	390 (27)	6.3	8 (1)	0.1	876 (61)	14.1	1,439 (21)	23.2
Suyuri	62	400 (24)	6.5	428 (25)	6.9	13 (1)	0.2	843 (50)	13.6	1,681 (24)	27.1
Jangwidoong	62	125 (22)	2.0	100 (17)	1.6	13 (2)	0.2	335 (58)	5.4	573 (8)	9.2
Banpo	62	370 (30)	6.0	201 (16)	3.2	51 (4)	0.8	606 (49)	9.8	1,228 (18)	19.8
Dongkyodong	62	321 (15)	5.2	740 (36)	11.9	9 (2)	0.1	1,012 (49)	16.3	2,082 (30)	33.6
Total	310	1,381 (20)	4.42	1,859 (27)	6.02	91 (1)	0.32	3,672 (52)	11.82	7,003 (100)	22.62

¹ Per day indicates sales per store-day.

² The figures indicate average sales per store-day in loaf.

Table III-26. Analysis of Bread Sales and Sales per Store-day by Area at Selected Supermarkets (During Feb. 1-28, 1977)

(Unit : loaf)

	Number of store-days	Soy-fortified bread		Regular bread		Regular bread		Milk bread		Total	
		Sales	Per ¹ day	Sales	Per day	Sales	Per day	Sales	Per day	Sales	Per day
Unit price		₩160		₩190		₩ 95		₩200			
Sungdong	56	35 (13)	0.6	77 (23)	1.4	1 (0)	-	163 (59)	2.9	276 (6)	4.9
Suyuri	56	403 (50)	7.2	209 (26)	3.7	0 (0)	-	198 (24)	3.5	810 (17)	14.5
Jangwiong	56	190 (33)	3.4	183 (32)	3.3	0 (0)	-	205 (35)	3.7	578 (12)	10.3
Banpo	56	220 (19)	3.9	290 (25)	5.2	5 (0)	0.1	658 (56)	11.8	1,173 (25)	20.9
Dongkyeong	56	108 (6)	1.9	863 (45)	15.4	5 (0)	0.1	960 (49)	17.1	1,936 (40)	34.6
Total	280	956 (20)	3.4 ²	1,622 (34)	5.8 ²	11 (0)	-2	2,184 (46)	7.8 ²	4,773 (100)	17.0 ²

¹ Per day indicates sales per store-day.

² The figures indicate average sales per store-day in loaf.

longer product life at supermarket than the life at neighborhood retail stores. Secondly, the tables seem to imply that the soy-fortified bread was more readily accepted by the customers of supermarkets, than the customers of neighborhood retail food stores.

In some case 50 per cent of total bread sales is made with the soy-fortified bread, and in several places of these tables the soy-fortified bread is found to sell over 30 per cent of the total sales. Even though the proportions of the sales of the soy-fortified bread to the total bread sales in different areas show wide disparities, they are not as wide as the case of the retail store data presented before.

Thirdly, the tables show that the proportion of the regular bread sales to the total bread sales are also much higher than it is found for the neighborhood retail stores studied. It may mean that the customers of a supermarket are more value conscious than the customers of ordinary retail stores, and the former seems to care economic benefit, safety and/or nutrition particularly in case of foods.

Table III-24 to III-26 also indicates that much larger amount of the soy-fortified bread were sold per store-day at the supermarkets than the retail stores sampled. However, the sales are not high enough in view of the total

bread normally sold at supermarkets. Even if the Sam Lip has sold larger share of bread in a store, usually a supermarket sells two or three brands of bread, so that the share of the soy-fortified bread presented in the tables should be reduced to some extent.⁴

Although the figures presented in the tables vary from one month to another and from one area to another, the disparities shown here are much smaller than it is shown previously for the retail stores. It is interesting to note that in two areas the sales per store-day of the soy-fortified bread shows steady increase, even though total bread sales decreased in February, but in another area it shows steady increase. This may imply that the sales of the soy-fortified bread is, to some extent, influenced by the effectiveness of the promotional activities of the company salesmen.⁵ In another words, in supermarket the physical display of the bread on the shelf is a very important and effective means of sales promotion.

⁴ Unlike as supermarket most of neighborhood retail foods stores sells only one brand of bread. Because daily sales of bread in each store is so small, and because poor replacing services of the producers which may often develop to a unpleasant consequence, neighborhood retail foods stores usually limit the number of brand to one.

⁵ The Sam Lip Company sells bread directly to all supermarkets around Seoul through the company salesmen who drive a pick-up truck and deliver the company products. Often these salesmen sells directly to some larger foods retail stores. In this case an arrangement is made in advance between the company and the dealer who is in charge of the area.

Sales Analysis upon Individual Store in Selected

Areas : Table III-27 presents a comparison of sales at two retail stores in two different areas. From each area two stores are chosen, i.e., one sold the largest volume of the soy-fortified bread in the area, and the other sold the least. These stores are chosen from the sales records of the sample stores, and an analysis is provided to make a comparison of the differences.

As the table shows during two months of December 1976 and January 1977 a store in Wangshipri area, which sold the largest volume of the soy-fortified bread, sold on the average three loaves a day and maintained about 27 per cent of the total sales. But at the other store, which made the least sales in the area, sold only 16 per cent of the total. The difference of the sales per day in each store is three to one ratio in two stores studied in the area. Even at the store that sold the least the proportion of the sales is maintained as high as the average of all retail stores sampled (72 stores).

As to a store in Moraenae area, which made the largest sales volume of the soy-fortified bread, sold about six loaves a day and maintained about 27 per cent of the total in two months period. But at the other store, which made the least sales of the soy-fortified bread in the area,

Table III-27. Proportion of Soy-fortified Bread Sales to Total Bread Sales at Selected Neighborhood Retail Stores in Selected Areas¹

	Wangshipri Area						Morzaenae Area					
	The Store Sold Largest Volume of Soy-fortified Bread			The Store Sold Least Volume of Soy-fortified Bread			The Store Sold Largest Volume of Soy-fortified Bread			The Store Sold Least Volume of Soy-fortified Bread		
	(a)	(b)	(b/a)	(a)	(b)	(b/a)	(a)	(b)	(b/a)	(a)	(b)	(b/a)
Total	Soy	(b/a)	Total	Soy	(b/a)	Total	Soy	(b/a)	Total	Soy	(b/a)	
During Dec. 1976												
1-10	153	50	32.7	76	17	22.4	199	53	26.6	127	13	10.2
11-20	101	28	27.7	52	8	15.4	217	70	32.3	144	30	20.8
21-31	<u>119</u>	<u>25</u>	<u>21.0</u>	<u>72</u>	<u>6</u>	<u>8.3</u>	<u>225</u>	<u>60</u>	<u>26.7</u>	<u>132</u>	<u>5</u>	<u>3.8</u>
Total	373	103	28.7	200	31	15.5	641	183	28.5	403	48	11.9
During Jan. 1977												
1-10	106	24	22.6	55	7	12.7	191	40	20.9	121	0	0.0
11-20	84	14	16.7	71	15	21.1	264	50	18.9	173	15	8.7
21-31	<u>146</u>	<u>50</u>	<u>34.2</u>	<u>74</u>	<u>11</u>	<u>14.9</u>	<u>281</u>	<u>95</u>	<u>33.8</u>	<u>246</u>	<u>5</u>	<u>2.0</u>
Total	336	88	26.2	200	33	16.5	736	185	25.1	540	20	3.7

¹ The data includes only the stores sold soy-fortified bread most extensively and the stores sold soy-fortified bread least in the selected areas.

sold only a little over one loaf a day and made only less than eight per cent of the total, The difference of the sales per day is six to one ratio in two stores studied in the area.

Depending on the location, the size of a store, and the ability to promote bread sales, a store is expected to have such wide disparity of the soy-fortified bread sales volume between two stores. Yet, the reasons for the disparity of the sales ratio of the soy-fortified bread to the total in the two different i.e., the largest and least selling, stores must be explained in some other way. In this case, plausible explanations would be; (1) the difference of promotional input of the salesmen who has regular contacts with the store concerned, and (2) varying degree of interest of the shopkeepers upon the soy-fortified bread.

During two months the stores, which sold the largest volume of the soy-fortified bread in each area, sold only less than one third of total bread sales made in the stores concerned. This suggests that the soy-fortified bread has a certain limit to expand its market and to compete effectively with other bread. On the other hand, the table also suggests that, if the bread was promoted with more effective measures by the Sam Lip dealers as well as by

the company, the more sales would have resulted in the least selling stores than it is shown in the table.

Bread Sales by Selected Areas as a Whole : In order to examine the bread sales data gathered from various sources, and to have some ideas to evaluate the sales of the soy-fortified bread the following tables (Table III-29 to III-34) are prepared. The sales data for the same eight areas, which are used for the test marketing, are gathered through the sales records of the Sam Lip.

In the following Table III-28 the number and the type of retail foods stores in respective areas are presented. In seven areas⁶ a total of 3,630 neighborhood retail foods stores are recorded as the Sam Lip customers. All Sam Lip products are distributed to these stores through the salesmen of the Sam Lip dealers. Other than these stores about 150 retailers should be added in the areas⁷ to be studied. These stores are taken cared directly by the company salesmen who visit to such special stores regularly with all Sam Lip products. They are assigned to visit only the stores

⁶ One of the area called "Youido" is covered only by the company salesmen, because the area is considered as important market for the company.

⁷ One of the area called "Moraenae" is covered only by the dealer of the area, because the company hasn't been able to open an account with the supermarkets in the area.

Table III-28. The Number of Sam Lip Customers (Retailers) in the Selected Areas

	<u>Number of Retailers</u>			<u>Total</u>
	<u>N. R.¹</u>	<u>Retail store</u>	<u>S. M.² Super-market</u>	
Sungdong	750	43	4	797
Wangshipri	521	-	-	521
Suyuri	472	14	7	493
Jangwidong	401	13	5	419
Banpo	585	16	5	606
Youido	-	14	5	19
Dongkyodong	483	10	9	502
Moraenae	<u>418</u>	<u>-</u>	<u>-</u>	<u>418</u>
Total	3,630	110	35	3,775

¹ N.R. stands for neighborhood foods retail stores,

² S.M, stands for sales made by company travelling salesman who normally visits all supermarkets and a few larger foods retail stores.

which are classified as supermarket or the stores which have strategic importance in a area. Sometimes a company salesman takes over a dealer's account, because for some reason a dealer is unable to maintain a account in his area. Therefore, in the following table "S.M" includes not only supermarket, but also the accounts opened and maintained by the company salesmen.

In compared with the other data shown previously Table III-29 alone shows the lowest share of the soy-fortified bread to the total bread sales in the same period. For three months period of December 1976 to February 1977 the Table III-17 and III-19 to III-22 present the share of the soy-fortified bread to the total are maintained more than ten per cent, except the share in February 1977 in Table III-17. Even in this case nine per cent of the total is maintained. However, Table III-29 shows that the share of the soy-fortified bread is only eight per cent of the total bread sales.

Although the share of the soy-fortified bread is quite different from one area to another, the figures shown in Table III-29 are much lower than the figures shown in table III-17 and III-19 to 21, probably except Jangwidong area. Such disparities of the share of the soy-fortified bread in the areas covered in this table might be explained as follows,

Table III-29. Analysis of Bread Sales by Selected Area
(During Dec. 1, 1976-Feb. 28, 1977)

(Unit : 100 loaves)

	<u>Soy-forti-</u> <u>fied bread</u> (450 gr.)	<u>Regular</u> <u>bread</u> (800 gr.)	<u>Regular</u> <u>bread</u> (400 gr.)	<u>Milk</u> <u>bread</u> (450 gr.)	<u>Total</u>
Unit price	₩160	₩190	₩95	₩200	
Sungdong					
N.R ¹	18.4(3)	73.1(13)	1.1(0)	464.2(84)	556.8(16)
S.M ²	8.7(5)	47.9(27)	0.4(0)	120.7(68)	177.7(5)
Wangshipri	31.0(9)	74.1(20)	3.3(1)	251.6(70)	360.0(11)
Suyuri					
N.R	32.3(9)	19.3(5)	0.3(0)	320.6(86)	372.5(11)
S.M	13.0(12)	25.0(22)	0.2(0)	74.8(66)	113.0(3)
Jangwidong					
N.R	54.0(17)	23.8(7)	3.3(1)	243.5(75)	324.6(10)
S.M	3.5(5)	11.0(16)	0.1(0)	55.6(79)	70.2(2)
Banpo					
N.R	33.9(11)	24.1(8)	2.0(1)	248.9(80)	308.9(9)
S.M	11.7(10)	28.5(25)	3.5(3)	68.9(62)	112.6(3)
Yeuido	5.5(4)	24.8(19)	0.0(0)	103.6(77)	133.9(4)
Dongkyodong					
N.R	11.7(4)	17.6(6)	0.8(0)	276.6(90)	306.7(9)
S.M	7.6(5)	49.9(36)	0.0(0)	81.1(59)	138.6(4)
Moraenae	<u>52.0(12)</u>	<u>13.7(3)</u>	<u>2.3(1)</u>	<u>349.2(84)</u>	<u>417.2(13)</u>
Total	283.3(8)	432.8(13)	17.3(1)	2,659.3(78)	3,392.7(100)

¹ N.R stands for neighborhood foods retail store

² S.M stands for sales made by company travelling salesman who normally visits all supermarkets and a few larger foods retail stores.

Table III-30. Analysis of Bread Sales by Selected Area
(During Mar. 1, 1977 - May 31, 1977)

(Unit : 100 loaves)

	<u>Soy-forti- fied bread</u> (450 gr.)	<u>Regular bread</u> (800 gr.)	<u>Regular bread</u> (400 gr.)	<u>Milk bread</u> (450 gr.)	<u>Total</u>
Unit price	₩160	₩190	₩95	₩200	
Sungdong					
N.R ¹	1.8(0)	100.3(16)	0.8(0)	531.3(84)	634.2(15)
S.M ²	0.5(0)	63.4(26)	0.2(0)	180.7(74)	244.8(6)
Wangshipri	9.0(3)	82.4(23)	0.0(0)	265.4(74)	356.8(9)
Suyuri					
N.R	17.2(4)	18.5(4)	0.0(0)	439.2(92)	474.9(11)
S.M	8.7(7)	29.7(23)	0.0(0)	93.1(70)	131.5(3)
Jangwidong					
N.R	20.2(5)	47.1(12)	4.1(1)	321.4(82)	392.8(9)
S.M	1.7(2)	18.9(19)	0.1(0)	76.7(79)	97.4(2)
Banpo					
N.R	20.8(4)	41.4(9)	0.0(0)	414.9(87)	477.1(11)
S.M	4.5(4)	31.4(27)	0.0(0)	79.0(69)	114.9(3)
Ycuido	0.0(0)	18.3(16)	0.0(0)	96.8(84)	115.1(3)
Dongkyodong					
N.R	3.6(1)	26.1(6)	1.5(0)	432.1(93)	463.3(11)
S.M	0.0(0)	53.5(35)	0.0(0)	97.5(65)	151.0(4)
Moraense	<u>4.9(1)</u>	<u>25.4(5)</u>	<u>2.2(0)</u>	<u>471.4(94)</u>	<u>503.9(12)</u>
Total	92.9(2)	556.4(14)	8.9(0)	3,499.5(84)	4,157.7(100)

¹ N.R stands for neighborhood foods retail store.

² S.M stands for sales made by company travelling salesman who normally visits all supermarkets and a few larger foods retail stores.

Table III-31. Analysis of Bread Sales by Selected Area
(During Jun. 1-30, 1977)

(Unit : 100 loaves)

	<u>Soy-forti- fied bread</u> (450 gr.)	<u>Regular bread</u> (800 gr.)	<u>Regular bread</u> (400 gr.)	<u>Milk bread</u> (450 gr.)	<u>Total</u>
Unit price	₩160	₩190	₩ 95	₩200	
Sungdong					
N.R ¹	0.0(0)	32.7(13)	0.0(0)	221.7(87)	254.4(100)
S.M ²	0.0(0)	20.9(31)	0.0(0)	45.7(69)	66.6(100)
Wangshipri	0.0(0)	29.7(15)	0.3(0)	170.5(85)	200.5(100)
Suyuri					
N.R	0.1(0)	5.2(0)	0.0(0)	188.2(97)	193.5(100)
S.M	0.3(1)	12.9(31)	0.0(0)	28.6(68)	41.8(100)
Jangwidong					
N.R	0.2(0)	20.4(11)	3.4(2)	169.2(87)	193.2(100)
S.M	0.0(0)	12.5(40)	0.0(0)	18.6(60)	31.1(100)
Banpo					
N.R	0.0(0)	11.2(6)	0.0(0)	186.5(94)	197.7(100)
S.M	0.0(0)	11.3(29)	0.0(0)	27.3(71)	38.6(100)
Youido	0.0(0)	10.0(22)	0.2(0)	34.9(78)	45.1(100)
Dongkyodong					
N.R	0.0(0)	8.6(4)	0.3(0)	194.2(96)	203.1(100)
S.M	0.0(0)	21.2(34)	0.0(0)	41.2(66)	62.4(100)
Yorannae	<u>0.0(0)</u>	<u>23.2(10)</u>	<u>3.0(1)</u>	<u>202.6(89)</u>	<u>228.8(100)</u>
Total	0.6(0)	219.8(13)	7.2(0)	1,529.2(87)	1,756.8(100)

¹ N.R stands for neighborhood foods retail store.

² S.M stands for sales made by company travelling salesman who normally visits all supermarkets and a few larger foods retail stores.

First of all, the share computed in Table III-29 includes all retail sales made through all stores, big or small. Due to high turnover of the milk bread that already established in the market, many of stores, especially, smaller ones prefer to handle the milk bread, but not the soy-fortified bread. Therefore, in order to show the true share of the soy-fortified bread in the market the figures computed in Table III-19 to III-21 should be readjusted to some extent.

Secondly, other than the retailers which had some experience in the sales of the soy-fortified bread, most retailers had little knowledge and incentive to promote the bread to their customers. Such promotional activities of distribution of the posters, the handout, the inserts in the package, etc., may haven't been utilized effectively by the retailers concerned as well as by the company sales personnels.

Thirdly, the areas selected here do not necessarily represent the best choice of the able dealers for the bread sales. So that it is natural to assume that unless the soy-fortified bread has unique features and sufficient incentive to the store keepers it is hardly expected to promote the product.

In Table III-32 to III-34 data on the sales of bread per store-day in eight areas are presented. Since the large number of retail stores, big or small are in existence, and since each sells small quantity of bread, an average loaf of bread sold in each store-day is inevitably turned out very small in number.

Furthermore, because the sales of bread is so small in each retail stores concerned, and its rapid decline is observed in later periods (Table III-33 and III-34), the sales per store-day for the soy-fortified bread is virtually meaningless. Such insignificant sales per store-day of the soy-fortified bread may effect to accelerate the decline of the sales in an area as a whole.

2-3. Comments on the Market Introduction of the Soy-fortified bread

In short, the sales records and its analysis of the soy-fortified bread may lead a conclusion that the poor sales of the bread is doomed to failure. Such disappointment upon its fate is suggested and commented in the previous section 1-3. In this section major reason of failure will be discussed as follows.

The Position of the Soy-fortified Bread in the Company

Table III-32, Bread Sales per Store-day by Area
(During Dec. 1, 1976-Feb. 28, 1977)

(Unit : loaf)

	Number of store in the area	Sales per Store-day ¹				<u>Total</u>
		<u>Soy-forti- fied bread</u> (450 gr.)	<u>regular bread</u> (800 gr.)	<u>regular bread</u> (450 gr.)	<u>Milk bread</u> (450 gr.)	
Unit price		₩160	₩190	₩ 95	₩200	
Sungdong						
N.R	750	0.03	0.11	0.0	0.69	0.82
S.M	47	0.21	1.13	0.01	2.85	4.20
Wangshipri	521	0.07	0.16	0.01	0.54	0.77
Suyuri						
N.R	472	0.08	0.05	0.0	0.75	0.88
S.M	21	0.69	1.32	0.01	3.96	5.98
Jangwidong						
N.R	401	0.15	0.07	0.01	0.67	0.90
S.M	18	0.22	0.68	0.01	3.43	4.33
Banpo						
N.R	585	0.06	0.05	0.0	0.47	0.59
S.M	21	0.62	1.51	0.19	3.65	5.96
Ycuido	19	0.32	1.45	0.0	6.06	7.83
Dongkyodong						
N.R	483	0.03	0.04	0.0	0.64	0.71
S.M	19	0.44	2.92	0.0	4.74	8.11
Moraena	<u>418</u>	<u>0.14</u>	<u>0.04</u>	<u>0.01</u>	<u>0.93</u>	<u>1.11</u>
Average		0.08	0.13	0.01	0.78	1.00

¹ Sales per store-day are computed with the actual sales divided by number of stores in its area times 90 days,

Table III-33. Bread Sales per Store-day by Area
(During Mar. 1, 1977-May 31, 1977)

(Unit : loaf)

	Number of store in the area	Sales per Store-day ¹				Total
		Soy-forti- fied bread (450 gr.)	Regular bread (800 gr.)	Regular bread (400 gr.)	Milk bread (450 gr.)	
Unit price		₩160	₩190	₩ 95	₩200	
Sungdong						
N.R	750	0.0	0.01	0.0	0.77	0.92
S.M	47	0.01	1.47	0.0	4.18	5.66
Wangshipri	521	0.02	0.17	0.0	0.55	0.74
Suyuri						
N.R	472	0.04	0.04	0.0	1.01	1.09
S.M	21	0.45	1.54	0.0	4.82	6.81
Jangwidong						
N.R	401	0.05	0.13	0.01	0.87	1.06
S.M	18	0.10	1.14	0.01	4.63	5.88
Banpo						
N.R	585	0.04	0.08	0.0	0.77	0.89
S.M	21	0.23	1.63	0.0	4.09	5.95
Youido	19	0.0	1.05	0.0	5.54	6.58
Dongkyodong						
N.R	483	0.01	0.06	0.0	0.97	1.04
S.M	19	0.0	3.06	0.0	5.58	8.63
Moraena	<u>418</u>	<u>0.01</u>	<u>0.07</u>	<u>0.01</u>	<u>1.23</u>	<u>1.31</u>
Average		0.03	0.16	0.0	1.01	1.20

¹ Sales per store-day are computed with the actual sales divided by number of stores in its area times 92 days.

Table III-34. Bread Sales per Store-day by Area
(During Jun. 1-30, 1977)

(Unit : loaf)

Unit price	Number of store in the area	Sales per Store-day ¹				Total
		Soy-forti- fied bread (450 gr.)	Regular bread (800 gr.)	Regular bread (450 gr.)	Milk bread (450 gr.)	
		₩160	₩190	₩ 95	₩200	
Sungdong						
N.R	750	0.0	0.15	0.0	0.99	1.13
S.M	47	0.0	1.45	0.0	3.17	4.63
Wangshipri	521	0.0	0.19	0.0	1.09	1.28
Suyuri						
N.R	472	0.0	0.04	0.0	1.33	1.37
S.M	21	0.05	2.05	0.0	4.54	6.63
Jangwidong						
N.R	401	0.0	0.17	0.03	1.41	1.61
S.M	18	0.0	1.95	0.0	2.91	4.86
Banpo						
N.R	585	0.0	0.06	0.0	1.06	1.13
S.M	21	0.0	1.79	0.0	4.33	6.13
Yeuido	19	0.0	1.75	0.04	6.12	7.91
Dongkyodong						
N.R	483	0.0	0.06	0.0	1.34	1.40
S.M	19	0.0	3.72	0.0	7.23	10.95
Noraense	<u>418</u>	<u>0.0</u>	<u>0.19</u>	<u>0.0</u>	<u>1.62</u>	<u>1.82</u>
Average		0.0	0.19	0.01	1.35	1.55

¹ Sales per store-day are computed with the actual sales divided by number of stores in its area times 30 days.

- 1) The sales of soy-fortified bread accounted only two per cent of the total monthly sales of the company, so that the introduction of the bread was not fully supported by the company.
- 2) Since bread had been considered as a losing item, the company did not put any extra promotional efforts or expenses to stimulate the sales.
- 3) The company seemed to have an expectation, i.e., the soy-fortified bread itself might create its customers when it was marketed.

The Impact of Pricing Decision

- 1) The price of 160 won for a loaf of the soy-fortified bread was inappropriate to promote the bread effectively. It was too high to compete with the cheaper (regular) bread, and too little difference between the price of the milk bread and the soy-fortified bread.
- 2) The company had too optimistic view on the government price control. It was too late when the company found that the soy-fortified bread might be difficult to survive in the market, unless high price raise for the regular bread was allowed, and unless the government permit tacitly to stop or reduce selling cheap bread.

- (3) The company did not want to lose money by selling the soy-fortified bread. The pricing decision was not based on the consumer reaction to it, but largely based on the cost factors to be covered. Especially, after the government permitted a small raise upon the price of regular bread, the company intended not to lose any further by selling bread. Such decision effected to hold the soy-fortified bread price to the predetermined level of 160 won. Such inflexibility, in turn, effected to the sales adversely.

Consumer Responses on the Product

- (1) No particular and serious negative consumer reactions were found during the market introduction. However, it does not necessarily be an indication of consumer preference upon it. The quality of the bread wasn't enough to induce the attention of the bread consumers.
- (2) After a few times of initial trial period of the bread, consumers tended to forget the value of the bread as nutritious and high protein bread.
- (3) As it is pointed out in the previous section (section 2-3) rather poor quality of the bread was still remained even after the bread was introduced.

- (4) Strong preference upon the milk bread is also found among bread users. It is also found that, when the company reduced the shipment of cheap bread, substitution effect is found upon the milk bread not upon the soy-fortified bread. This implies that strong consumer preference upon the quality of bread is found.
- (5) Consumers are given alternatives to buy bread among different quality level of bread, and tend to choose better quality bread, rather than cheap product. Therefore, the soy-fortified bread is found difficult to penetrate into the heavy users, who usually buy milk bread.

Comments on Distribution

- (1) As other bread dual channels of distribution were employed to deliver the soy-fortified bread, i.e., through the dealers assigned by area, and through the company salesmen. Since the bread is bulky and cheap in comparison with other products of the company, the bread was treated as one of bread produced by the company without any extra care.
- (2) During the initial introductory period no special incentive or bonus was provided for the dealers, retailers, and the salesmen of the company as well

as the dealer's. Therefore, unless the bread itself has a unique attraction or selling power, it would have a little chance to survive in the market.

Comments on Sales Promotion

- (1) Such promotional materials as posters, leaflet and package insert had not been effectively utilized, and, to a large extent, these materials were mostly wasted at the retailers who were supposed to handle them effectively. It is obvious that the sales personnels of the Sam Lip did not paid enough attention for the follow-up control of these promotional materials as well as the sales control of the bread.
- (2) No serious negative reaction was found in consumer response upon the radio advertising of the soy-fortified bread, yet, it is doubtful whether the radio advertising drew sufficient and effective response from bread users for the sales increase. The advertising messages seemed to have limited impact upon the sales of the bread.
- (3) Advertising budget was largely inadequate to have enough exposure of it to its consumers. Moreover, the discontinuation of the advertising after one month certainly exerted to shorten the market life of the bread.

(4) The most serious difficulty of the company was that the company had little available human as well as physical resources to spare for the promotion of the soy-fortified bread.

Comments on the Amount of the Sales

- (1) The absolute sales amount of the soy-fortified bread in each retail store was too small, so that it does not justify to maintain an interest of the retailers. Even at supermarkets the share of the sales is not adequate to pay some extra attention to the soy-fortified bread by the storekeepers.
- (2) A limited number of retail stores sold most of the soy-fortified bread in the market. This implies that the small portion of the salesmen tried to sell the bread actively.

Chapter IV

SUMMARY AND CONCLUSIONS

Summary of the Study

This study is an attempt to provide useful market information on foods and bread consumption in Korea either through macro and micro data currently available or through a series of consumer field surveys conducted by the research team. Also, the study is designed to provide the information on the feasibility of marketing the soy-fortified bread in Korea through a series of field surveys, the test marketing and the trial market-wide distribution of the bread produced by the Sam Lip Foods Company, Ltd.

In relation to macro demand analysis of Chapter I our interest lies in long-term projection of aggregate and per capita demand for foods rather than statistical trends in the past consumption of foodstuffs. The quantitative estimates of demand for foodstuffs in general and that for soy-fortified bread in particular are extremely difficult to be made on the basis of available, but often conflicting, data. What follows is a brief summary of best estimates available from these inadequate sources.

According to the KASS group's optimistic projections for aggregate demand for and supply of major food items, all other food categories except the following items are expected to attain self-sufficiency by 1985. The items which are likely to be less than self-sufficient are wheat (47.4 per cent self-sufficient), other grains (54.1 per cent), pulses (86.3 per cent), rice (96.1 per cent), and vegetables (97.7 per cent).

The projections of per capita demand for foodstuffs through 1981 on the basis of the 1976 food balance sheet are summarized below. The per capita demand for food-grains except wheat is expected to decrease by 3 per cent and that for potatoes to fall by 15 per cent over the period from 1976 to 1981. The per capita demand for all other items than these two is expected to grow at varying rate over the same period. The items with high rate of demand growth are seaweeds (130 per cent), milk (91 per cent), edible oils (82 per cent), nuts and seeds (58 per cent), fish (53 per cent), chicken (35 per cent), pulses (29 per cent), and beef (26 per cent) in that order. From these one can note a pronounced trend in rapidly increasing demand for high-protein food items.

A more direct way of looking at the future demand is to compare the actual average daily calorie intakes of

grains and animal products with target values. Actual calorie intakes from grains in 1974 were far above targets and those from animal and marine products are far below targets for both farm and non-farm residents. In the case of farm residents, 47 calories were taken from animal and marine products per person per day in 1974, as compared with the target of 169 calories. In the case of non-farm residents, 178 calories were taken from the same sources in 1974 as compared with the target of 386 calories. Judging from such wide gaps existing between actual and targets, the demand for high-protein foods through the shift of intakes from grains to animal and marine products is expected to rise sharply over the period through 1985. To what extent this gap will be filled by the prospective soy-fortified bread through 1981 or 1985 would largely depend on its relative price, the level and distribution of household income, taste changes, and, above all, effective marketing efforts.

Based on the study made by ASI smaller percentage (25%) of Korean urban households eat and purchase bread, and still smaller number (11.2%) of the households are classified as heavy users, who eat bread several times a week. Therefore, it may take many more years for many non-users to become the new users of bread.

Many reasons for not eating bread are stated by non-users of bread who consist of three fourths of total urban households. Among them most frequently mentioned two reasons are; (1) the notion of bread as an expensive food, and (2) bread as an unaccustomed food for a meal to ordinary consumers.

The amount of bread consumption of the users is widely spread over from less than one loaf to over seven loaves a week. However, one half of the users consume between two to four loaves a week.

So far bread is normally eaten as a substitution for a meal or snack. Rice consumption would not be replaced by bread in the foreseeable future.

Such findings are partially proved by the surveys conducted for the bread users in Seoul. Throughout the surveys bread users, who are average or above in terms of income and social class, had been contacted, and various data were gathered concerning the consumer attitude and bread consumption habits.

Based on the same classification used in ASI study the surveys made here shows that about one half of bread users are classified as the heavy users, and such proportion is found in both occasions of bread used for a meal and for a snack.

Weekly consumption has a little correlation with the level of householder's monthly income. However, some relationship is found between the family size and bread consumption, i.e., the larger the family size is, the more bread is consumed, and vice versa.

It is evident that the larger proportion of households seems to consider bread as an appropriate food for snack. Also, some positive relationship is found between use habit of bread as a meal and as a snack. Generally, consumers prefer good quality bread rather than cheap bread. Particularly, younger family members who are the most favored users prefer better taste of bread.

As to the soy-fortified bread buyers' assessment on the quality is as inferior product, especially, compared with the milk bread.

Only small proportion of consumers bought the bread repeatedly. The unique feature of nutrition and high protein are easily offset by the poor quality of the bread. Most consumers express their interest of the soy-fortified bread without adherence to price.

The promotional means planned were not effectively employed during the both period of test market and market-wide distribution of the bread. Such fact is revealed in the surveys as the low level of consumer awareness upon

the promotional materials, which were provided by the Sam Lip, was indicated. "Word of mouth" communication about the soy-fortified bread among consumers, and between the salesmen and customers, seems to influence most to disseminate the information on the bread, rather than any other sources.

Bread consumers seem to have less sensitive on the price of the bread, than on the quality of it. Primary purpose of the surveys was to evaluate the responses of the different prices charged to the soy-fortified bread in the test marketing. Yet, such purpose turn to be a failure, because the surveys did not present any significant difference in the response by the different bread price. Rather such consumer response upon the bread price is verified by the result of sales made in the areas where different prices were charged.

Based on the project planned test sales of the soy-fortified bread was carried out for eight weeks in the preselected retail stores in eight areas. Three price levels (95, 140 and 180 won) were set for the test sales of the soy-fortified bread. Practically, the same ratio of margins given to other bread, were allocated to the respective distributors concerned.

Because of technical difficulty, and of material costs, the bread had some handicap of poor quality from the beginning of its sale. Unpleasant odor and harsh texture might effect to reduce the repeated sales of the bread.

Promotional materials, such as posters, leaflet, and package insert and a good deal of sample packs were distributed to the test stores. These were hoped to serve to promote the bread at the stores. However, its effectiveness was largely lessened by the misuse of them at stores as well as by the distributors as a whole.

Also, a great deal of difference in sales are found by the price difference. Toward the end of the test sales period the sales in the areas where higher prices were charged dropped rapidly almost to zero. The same trend is found for the sales in supermarkets.

Concerning the pricing decision of the soy-fortified bread 180 won for a loaf was found definitely as too high. The price of 140 won for a loaf was also found as too high in the test sales. Even at 95 won the share of the bread remains below 30 per cent of the total bread sales. Therefore, the sales records implies that the bread itself may not be successful at any price above 95 won.

However, in view of the marketing activities conducted by the company during the test period, such disappointment may not entirely be responsible for the higher price alone. Rather unsuccessful result of the sales might be explained in some other way, too, such as; (1) poor quality of the bread with unpleasant odor, (2) the presence of strong preference upon the milk bread which has been known as better bread, (3) the lack of sufficient and effective use of the promotional materials, (4) the lack of a special monetary incentive to the distributors as a whole, (5) the lack of integral marketing program for the promotion of the soy-fortified bread.

With such unsuccessful marketing experience of the soy-fortified bread the company finally began to sell the bread for market-wide distribution in late November 1976. The price was set to 160 won for a loaf. It was considered reasonable in view of costs of the bread and of the government permit upon the bread. But such decision was certainly not based on marketing facts, especially, which were uncovered during the period of test sales.

The same level of distribution margins were allocated to the distributors concerned, which is almost same as the margins of other bread. No additional incentive or promotional materials were introduced except radio advertising. It lasted for a month.

During the market-wide distribution the highest share of the soy-fortified bread sales reached a little more than 14 per cent of the total in the first month. However, it declined steadily in 1977 and the sales was discontinued finally in June 1977. Even though during the period the company may be intentionally, reduced the production of the regular bread, and hoped to increase the sales of the soy-fortified bread, but such hope turned into vain.

The data for the sample store sales shows wide disparity of the share of the sales to the total among the areas to which the study was made. Since same retail price was charged by the company such disparity of the sales in different areas must be explained in some other ways.

The following factors may be considered as critical to make the bread sales successful. These are; (1) Insufficient product improvement, (2) the lack of sufficient promotional means including advertising, (3) the lack of incentive to those who are engaged in the bread distribution, (4) rigid government price control upon bread, and (5) the lack of proper marketing plans and strategy to promote the soy-fortified bread.

In short, the market-wide introduction of the soy-fortified bread is doomed to failure. Its position in

the company product line, the value of the bread in the company, and the complicated problems mentioned above, compelled the bread defenseless in the market.

Conclusions

Based on the analysis made in this report the specific conclusions and recommendations will be presented in a summary fashion below.

1. Increasing Need for High Protein Soy Foods

In order to meet a pronounced trend in rapidly increasing demand for high-protein food in Korea, the most popular suggestion will be to develop protein food by using soy. Because of the costs and limitation of supplying animal protein food, it is certain that pressure of filling the gap with soy-protein food will be augmented in the near future. The necessity of developing such soy-protein food have already resulted to induce a modern soy-processing plant in Korea.

However, the prospective of developing such protein food would largely depend on; (1) its technical competence in the imitation of animal protein food with soybean, (2) its relative price to animal protein. and (3) developing

effective marketing efforts by the manufacturer of soy food.

2. Major Causes of the Failure of the Sam Lip to Market the Soy-fortified Bread

Even though at this stage of the development and marketing the soy-fortified bread has failed, effort for further improvement of the soy-fortified bread must be pursued along this trend in developing low costs high protein food in Korea.

With a growing importance of the high protein food in Korea the Sam Lip had tried and spent a large sum of money to develop and market the soy-fortified bread, in the last two year. However, its life in the market had been lasted only seven months. The following limitations and problems are assumed to effect to the failure of the bread.

- (1) The price of 160 won for a loaf of the soy-fortified bread was set too high to compete with cheaper bread.
- (2) The Sam Lip set the price based on the costs not on the basis of consumer reaction to it. Too many constraints had been imposed in reducing the high price.

- (3) Unfortunately, no positive and enduring consumer acceptance upon the soy-fortified bread was shown in the retail stores.
- (4) The quality of bread wasn't intolerable to most consumers. Yet, to those who used to eat the milk bread, the soy-fortified bread merely provided unfavorable image. Moreover, the fundamental attributes of nutrition and high protein were largely ignored, because most consumers did not care for such attributes of bread.
- (5) All initial sales figures of the soy-fortified bread show considerable achievement of market penetration in short period. This provides two critical factors to increase or retain the sales, namely the sales of the soy-fortified bread may well depend on; (1) the efforts of the entire sales forces engaged in the channels of bread distribution, and (2) consumer acceptance on the bread. However, both conditions were largely unfilled in the marketing of the soy-fortified bread.
- (6) As a result of insufficient advertising expenses and inadequate management of promotional materials, the sales of the soy-fortified bread declined rather fast. Unfortunately, the company had little available resources to add to increase or retain the sales.

3. Uncontrollable Causes of the Failure

Concerning the responsibility of the failure the above mentioned causes of failure that primarily directed toward the Sam Lip may easily give misleading impression to the readers. Certainly, the primary responsibility of the failure of marketing the soy-fortified bread should be borne by the Sam Lip. However, it should be remembered that there has been some uncontrollable factors and prevailing environment which, after all, led the bread to failure. These are presented as follows.

- (1) As it is shown in the analysis of the market surveys presented in previous Chapter II, only small portion of households eat bread regularly. In other words, the soy-fortified bread was introduced too early in Korea, without having sufficient demand for bread from the lower income group. They need such nutritious bread at lower price, but such foods as noodle and "ramyun," are still available at cheaper price.
- (2) The sales of bread is carried through thousands of small retailers, so that each retailer sells only several loaves a day. Such existing low level of demand inevitably creates inefficient distribution and promotion of bread at each retail store as well

as by the manufacturers. Therefore, it was difficult to provide any additional incentive for increasing the sales.

- (3) Unavailability of good quality soy-flour at reasonable price definitely effected to hurt the sales. In this respect the company was not entirely responsible for the higher price and poor quality of the bread.
- (4) As it is mentioned before, the soy-fortified bread accounts only two per cent of the total monthly sales of the company, so that it was difficult to allocate additional company resources for the promotion of bread.
- (5) Because of a complicated problem involved in dealing with the government price control, the company had a limit to exercise appropriate marketing strategy, particularly, in pricing of the bread.

4. Suggested Future Actions to be Taken by the Sam Lip

Even though the first attempt of marketing the soy-fortified bread has failed, it is worthwhile to consider and examine carefully about the following points. That is,

- (1) It is strongly recommended to continue to develop

the soy-fortified bread. Since the Sam Lip owns two of the three large bread manufacturing concerns in Seoul, and it is capable of controlling bread market, the company is in an ideal position to explore the feasibility of the soy-food, including the soy-fortified bread.

- (2) In order to provide high-protein food to the lower income group at reasonable price, the company should consider to develop new products which contain soy-flour, and eaten by the lower income group. Other than soy-fortified bread, the company may be able to develop such soy product as soy contained pastries, soy steam bread. These are assumed to have larger market than the soy-bread. Such an endeavour may be an important step of the company to serve to the public.
- (3) If the price of soy-flour can be reduced to some extent, and the company may produce the soy-fortified bread at cheaper costs, the company should consider seriously to replace the regular bread with the soy-bread. Of course, a required provision of the company is to improve the quality of the bread especially, eliminating bad odor. In such case, the price of the soy-fortified bread must be much lower than the price of milk bread.

(4) It is recommended to distribute the soy-fortified bread through supermarkets only during the initial promotion period, if the company plans to resume marketing the bread in near future. Because of low sales volume of bread in neighborhood food stores, it is not recommended to sell the soy-fortified bread through all retailers, especially, to smaller retailers. Moreover, the bread should be distributed only in large cities where minimum level of sales can be made. The primary reason for such limiting the channel of distribution is to concentrate available marketing resources into a limited outlets, and to secure a reasonable portion of bread sales. If such an attempt is planned again, and past experiences are effectively utilized, the bread may well have a chance to survive in Korea.

P E N D I X

APPENDIX

I. List of the Tables

<u>Table</u>	<u>Page</u>
A. I-1. Average Annual per Capita Income of the Farm, Nonfarm and Total Populations, 1965-74	1
A. I-2. Average Annual Farm and Nonfarm Prices by Crop, 1965, 1970, 1974	2
A.II-1. Occupation and Monthly Income of Householder	3
A.II-2. Size of Residence by Monthly Income of Householder (Survey III)	4
A.II-3. Size of Residence by Monthly Income of Householder (Survey IV)	6
A.II-4. Amount of Bread Purchased and Eating Habit (as a Meal)	7
A.II-5. Amount of Bread Purchased and Eating Habit (as a Snack)	8
A.II-6. Amount of Bread Purchased and Eating Habit (as a Snack)	9
A.II-7. Opinion on the Features of the Soy-fortified Bread (In Reference to Milk Bread Based on Survey III)	10
A.II-8. Buying Experience of the Soy-fortified Bread by Area after the Introduction of the Bread to Nation-wide Distribution .	11
A.II-9. Attitude on the Price of the Soy-fortified Bread	12

II. Questionnaire Forms

	<u>Page</u>
1. Survey I (For pre-sales survey)	13
2. Survey II (For test sales survey part I)	16
3. Survey III (For test sales survey part II) ..	19
4. Survey IV (For non-users survey)	27
5. Survey V (For the follow-up mail survey)	33

Table A. I-1. Average Annual Per Capita Income of the Farm, Nonfarm and Total Populations, 1965-74

Year	Farm Residents		Nonfarm Residents		Total Population			
	Current Income	Real Income	Current Income	Real Income	Current Income	Real Income	Real Income	
					1	2	3	
(Won per person per year)								
1970	42,100		69,600		72,700		58,300	
(index of income--1970=100)								
1964	44.7	90.3	24.1	48.8	30.6	48.9	61.9	67.9
1965	40.6	73.1	27.9	49.8	34.3	50.4	61.7	71.0
1966	47.5	76.9	41.8	66.9	43.0	57.9	69.2	73.9
1967	56.1	77.2	68.7	99.4	52.0	65.4	73.3	78.9
1968	68.4	85.2	74.1	96.7	64.1	74.8	81.7	85.2
1969	83.4	95.2	86.6	100.5	81.9	89.5	94.2	92.3
1970	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1971	142.5	126.9	123.0	108.4	119.7	110.2	106.0	108.2
1972	175.8	140.3	148.1	116.8	144.3	116.5	114.5	113.7
1973	194.8	146.1	150.6	115.1	181.1	136.8	137.1	121.3
1974	277.0	146.0	177.7	110.0	245.0	130.1	139.5	125.7

- Notes :
1. Current farm income is based on the disposable income reported Farm Household Survey (Bureau of Agricultural Statistics).
 2. Real farm income is the current farm income deflated by the index of prices paid by farmers for all household goods (NACF).
 3. Current nonfarm income is based on the disposable income (including rent but excluding nonconsumption expenditure) of wage- and salary-earner households reported in the Urban Household Survey (EFB).
 4. Real nonfarm income is the current nonfarm income deflated by the index of prices paid by consumers for all commodities in all cities (EPB).
 5. Current income of the total population is based on estimates of per capita gross national product (GNP) (Bank of Korea).
 6. (1) Real income of the total population is the current total income (NGP) deflated by the wholesale price index (Bank of Korea).
 (2) Real income of the total population is the current total income (GNP) deflated by the average of the indices of prices paid by farmers for all household goods (NACF and EPB).
 (3) Real income of the total population is the average per capita private consumption expenditure expressed in constant market price (Bank of Korea).

Table A. I-2. Average Annual Farm and Nonfarm Prices
by Crop, 1965, 1970, 1974

	Farm Prices				Nonfarm Prices			
	Price 1970	Index (1970=100)			Seoul Price 1970	Index (1970=100)		
		1965	1970	1974		1965	1970	1974
	W/Kg				W/Kg			
Rice	76.3	53.5	100.0	242.8	79.0	55.6	100.0	237.0
Barley	40.4	61.6	100.0	232.9	46.4	68.3	100.0	173.7
Wheat flour	35.6	94.6	100.0	250.1	35.1	98.0	100.0	252.1
Misc. grain	30.9	64.4	100.0	249.0	60.3	52.9	100.0	258.0
Pulses	91.6	54.6	100.0	193.6	105.9	49.9	100.0	167.3
Total grain	73.4	54.5	100.0	237.9	78.2	59.2	100.0	201.2
Fruit	60.7	46.2	100.0	203.3	163.6	50.8	100.0	172.0
Vegetables	66.7	40.0	100.0	131.9	62.4	58.9	100.0	139.3
Potatoes	15.2	62.0	100.0	324.0	41.9	55.8	100.0	189.6
Ind. crops	196.8	65.8	100.0	220.0	390.7	48.4	100.0	176.4
Total other	66.3	45.1	100.0	173.1	109.1	57.2	100.0	148.2
Beef	641.7	35.6	100.0	196.1	788.3	50.7	100.0	170.2
Milk	105.1	56.8	100.0	161.7	105.1	56.8	100.0	161.7
Pork	351.7	51.7	100.0	190.5	396.7	53.4	100.0	179.8
Poultry	341.7	62.5	100.0	174.0	263.0	59.7	100.0	201.5
Eggs	216.4	73.1	100.0	173.1	286.0	70.6	100.0	151.0
Fish & seaweed	188.8	44.1	100.0	159.0	257.1	43.3	100.0	164.2
Total animal	268.1	44.1	100.0	169.9	408.7	40.3	100.0	168.0
Food & beverages	94.7	53.3	100.0	185.6	199.3	55.3	100.0	176.3
Tobacco	1,201.3	63.3	100.0	83.3		74.7	100.0	88.1
Nonfood		55.7	100.0	191.1		57.2	100.0	150.9
All items		55.1	100.0	189.7		56.0	100.0	161.6

Source : KAERI & Michigan State University Department of Economics, Demand Relationships for Food in Korea, 1965-1974. Special Report No. 12, KASS Project, January 1977.

Table A. II-1. Occupation and Monthly Income of Householder (Survey IV)

Occupation Income	Managerial & professional jobs		Middle management		Small proprie- tors		Clerical workers		Sales worker & technician		Unskilled worker		Others		No response		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
More than W400,000	3	9.7	0	0.0	2	3.3	0	0.0	0	0.0	0	0.0	1	5.0	0	0.0	6	3.1
W250,001- 400,000	9	29.0	5	15.6	10	16.7	5	13.5	0	0.0	0	0.0	3	15.0	0	0.0	32	16.4
W150,001- 250,000	10	32.3	16	50.0	18	30.0	9	24.3	2	20.0	0	0.0	8	40.0	0	0.0	63	32.3
W100,001- 150,000	4	12.9	5	15.6	19	31.7	12	32.4	2	20.0	0	0.0	4	20.0	2	50.0	48	24.6
W 70,001- 100,000	1	3.2	5	15.6	10	16.7	9	24.3	1	10.0	0	0.0	0	0.0	0	0.0	26	13.3
Less than W 70,000	0	0.0	0	0.0	1	1.7	2	5.4	4	40.0	1	100.0	2	10.0	0	0.0	10	5.1
No response	<u>4</u>	<u>12.9</u>	<u>1</u>	<u>3.1</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>10.0</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>10.0</u>	<u>2</u>	<u>50.0</u>	<u>10</u>	<u>5.1</u>
Total	31	100.0	32	100.0	60	100.0	37	100.0	10	100.0	1	100.0	20	100.0	4	100.0	195	100.0

Table A. II-2 (a). Size of Residence by Monthly Income of Householder

Income Size (Phyong)	More than ₩400,000		₩250,001-400,000		₩150,001-250,000		₩100,001-150,000		₩ 70,001-100,000		Less than ₩ 70,000		No response		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
More than 45	11	57.9	19	27.5	32	24.1	12	10.2	3	4.7	0	0.0	3	30.0	80	18.1
31 - 45	5	26.3	28	40.6	38	28.6	25	21.2	3	4.7	0	0.0	1	10.0	100	22.6
21 - 30	3	10.5	17	24.6	45	33.8	42	36.4	19	29.7	3	10.3	4	40.0	133	30.1
15 - 20	0	0.0	3	4.3	13	9.8	31	26.3	20	31.3	11	37.9	1	10.0	79	17.9
Less than 15	0	0.0	2	2.9	5	3.8	8	5.9	16	25.0	15	51.7	0	0.0	46	10.4
No response	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>3</u>	<u>4.7</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>10.0</u>	<u>4</u>	<u>0.9</u>
Total	19	100.0	69	100.0	133	100.0	118	100.0	64	100.0	29	100.0	10	100.0	442	100.0
	(4.3)		(15.6)		(30.1)		(26.7)		(14.5)		(6.6)		(2.3)			

Table A. II-2(b). Size of Residence by Monthly Income of Householder (Survey III)

Income Size (Phyong)	More than ₩400,000		₩250,001- 400,000		₩150,001- 250,000		₩100,001- 150,000		₩ 70,001- 100,000		Less than ₩ 70,000		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
More than 45	8	61.5	8	21.6	19	27.1	7	10.0	2	5.3	0	0.0	44	17.8
31 - 45	3	23.1	16	43.2	15	21.4	13	18.6	1	2.6	0	0.0	48	19.4
21 - 30	2	15.4	8	21.6	26	37.1	24	34.3	13	34.2	0	0.0	73	29.6
15 - 20	0	0.0	3	8.1	9	12.9	19	27.1	15	39.5	9	47.4	55	22.3
Less than 15	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>5.4</u>	<u>1</u>	<u>1.4</u>	<u>7</u>	<u>10.0</u>	<u>7</u>	<u>18.4</u>	<u>10</u>	<u>52.6</u>	<u>27</u>	<u>10.9</u>
Total	13	100.0	37	100.0	70	100.0	70	100.0	38	100.0	19	100.0	247	100.0
	(5.3)		(15.0)		(28.3)		(28.3)		(15.4)		(7.7)			

Table A. II-3. Size of Residence by Monthly Income of Householder (Survey IV)

Income Size (Phyong)	More than ₩400,000		₩250,001- 400,000		₩150,001- 250,000		₩100,001- 150,000		₩ 70,001- 100,000		Less than ₩ 70,000		No response		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
More than 45	3	50.0	11	34.4	13	20.6	5	10.4	1	3.8	0	0.0	3	30.0	36	18.5
31 - 45	2	33.3	12	37.5	23	36.5	12	25.0	2	7.7	0	0.0	1	10.0	52	26.7
21 - 30	1	16.7	9	28.1	19	30.2	18	37.5	6	23.1	3	30.0	4	40.0	60	30.8
15 - 20	0	0.0	0	0.0	4	6.3	12	25.0	5	19.2	2	20.0	1	10.0	24	12.3
Less than 15	0	0.0	0	0.0	4	6.3	1	2.1	9	34.6	5	50.0	0	0.0	19	9.7
No response	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>3</u>	<u>11.5</u>	<u>0</u>	<u>0.0</u>	<u>1</u>	<u>10.0</u>	<u>4</u>	<u>2.1</u>
Total	6	100.0	32	100.0	63	100.0	48	100.0	26	100.0	10	100.0	10	100.0	195	100.0
	(3.1)		(16.4)		(32.3)		(24.6)		(13.3)		(5.1)		(5.1)			

Table A. II-4. Amount of Bread Purchased and Eating Habit (as a Meal)

Eating Habit Loaf	More than once a day		3 times a week		Once a week		Rarely eat bread		Do not eat at all		No response		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
0.5 or less than 0.5	9	2.9	6	2.0	16	7.4	73	23.1	15	26.8	5	7.4	124	9.7
More than 0.5 to 1	16	5.1	26	8.5	63	29.0	78	24.7	9	16.1	22	32.4	214	16.7
More than 1 to 1.5	33	10.5	53	17.3	61	28.1	64	20.3	13	23.2	16	23.5	240	18.8
More than 1.5 to 2	32	10.2	59	19.3	36	16.6	32	10.1	8	14.3	9	13.2	176	13.8
More than 2 to 3	55	17.5	84	27.5	25	11.5	36	11.4	5	8.9	9	13.2	214	16.7
More than 3 to 4	87	27.6	56	18.3	12	5.5	23	7.3	6	10.7	7	10.3	191	14.9
More than 4	<u>83</u>	<u>26.3</u>	<u>22</u>	<u>7.2</u>	<u>4</u>	<u>1.8</u>	<u>10</u>	<u>3.2</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>	<u>119</u>	<u>9.3</u>
Total	315	100.0	306	100.0	217	100.0	316	100.0	56	100.0	68	100.0	1,278	100.0

Table A. II-5. Amount of Bread Purchased and Eating Habit (as a Snack)

Eating Habit Loaf	More than once a day		3 times a week		Once a week		Rarely eat bread		Do not eat at all		No response		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
0.5 or less than 0.5	8	2.6	12	3.0	27	10.3	59	34.3	10	17.5	8	11.0	124	9.7
More than 0.5 to 1	17	5.5	52	12.8	83	31.6	40	23.3	7	12.3	15	20.6	214	16.7
More than 1 to 1.5	38	12.4	95	23.4	72	27.4	20	11.6	8	14.0	7	9.6	240	18.8
More than 1.5 to 2	37	12.1	71	17.5	37	14.1	14	8.1	5	8.8	12	16.4	176	13.8
More than 2 to 3	55	17.9	95	23.4	28	10.6	16	9.3	10	17.5	10	13.7	214	16.7
More than 3 to 4	70	22.8	62	15.3	11	4.2	14	8.1	13	22.8	21	28.8	191	14.9
More than 4	<u>82</u>	<u>26.7</u>	<u>19</u>	<u>4.7</u>	<u>5</u>	<u>1.9</u>	<u>9</u>	<u>5.2</u>	<u>4</u>	<u>7.0</u>	<u>0</u>	<u>0.0</u>	<u>119</u>	<u>9.3</u>
Total	307	100.0	406	100.0	263	100.0	172	100.0	57	100.0	73	100.0	1,278	100.0

Table A. II-6. Amount of Bread Purchased and Eating Habit (as a Snack)

(a) Survey I & II

Eating Habit Loaf	More than once a day		3 times a week		Once a week		Rarely eat bread		Do not eat at all		No response		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0.5 or less than 0.5	3	1.42	7	2.83	12	8.05	34	31.78	7	14.58	8	10.96	71	8.49
More than 0.5 to 1	8	3.77	29	11.74	44	29.53	23	21.50	7	14.58	15	20.55	126	15.07
More than 1 to 1.5	22	10.38	54	21.86	43	28.86	12	11.21	7	14.58	7	9.59	145	17.34
More than 1.5 to 2	25	11.79	45	18.22	23	15.44	9	8.41	5	10.42	12	16.44	119	14.23
More than 2 to 3	41	19.34	56	22.67	17	11.41	12	11.21	8	16.67	10	13.70	144	17.22
More than 3 to 4	58	27.36	42	17.00	7	4.70	10	9.35	11	22.92	21	28.77	149	17.82
More than 4	<u>55</u>	<u>25.94</u>	<u>14</u>	<u>5.67</u>	<u>3</u>	<u>3.01</u>	<u>7</u>	<u>6.54</u>	<u>3</u>	<u>6.25</u>	<u>0</u>	<u>0.0</u>	<u>82</u>	<u>9.81</u>
Total	212	100.0	247	100.0	149	100.0	107	100.0	43	100.0	73	100.0	836	100.0

(b) Survey III & IV

0.5 or less than 0.5	5	5.3	5	3.1	15	13.2	25	38.5	3	33.3	53	12.0
More than 0.5 to 1	9	9.5	23	14.5	39	34.2	17	26.2	0	0.0	88	19.9
More than 1 to 1.5	16	16.8	41	25.8	29	25.4	8	12.3	1	11.1	95	21.5
More than 1.5 to 2	12	12.6	26	16.4	14	12.3	5	7.7	0	0.0	57	12.9
More than 2 to 3	14	14.7	39	24.5	11	9.6	4	6.1	2	22.2	70	15.8
More than 3 to 4	12	12.6	20	12.6	4	3.5	4	6.1	2	22.2	42	9.5
More than 4	<u>27</u>	<u>28.4</u>	<u>5</u>	<u>3.1</u>	<u>2</u>	<u>1.8</u>	<u>2</u>	<u>3.1</u>	<u>1</u>	<u>11.1</u>	<u>37</u>	<u>8.4</u>
Total	95	100.0	159	100.0	114	100.0	65	100.0	9	100.0	442	100.0

Table A. II-7. Opinion on the Features of the Soy-fortified Bread
(In Reference to Milk Bread, Based on Survey III)

Features Opinion	Flavor		Odor		Texture		Colour		Stickiness		Shape		Thickness of a piece design		Package of a piece design		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Excellent	7	4.8	4	2.7	5	3.4	2	1.4	1	0.7	2	1.4	1	0.7	10	6.8	32	2.7
Good	29	19.7	18	12.2	19	12.9	40	27.2	36	24.5	35	23.8	38	25.9	41	27.9	256	21.8
Fair	34	23.1	62	42.2	49	33.3	58	39.5	38	25.9	95	64.6	91	61.9	80	54.4	507	43.1
Poor	73	49.7	61	41.5	69	46.9	44	29.9	68	46.3	14	9.5	17	11.6	14	9.5	360	30.6
Very poor	<u>4</u>	<u>2.7</u>	<u>2</u>	<u>1.4</u>	<u>5</u>	<u>3.4</u>	<u>3</u>	<u>2.0</u>	<u>4</u>	<u>2.7</u>	<u>1</u>	<u>0.7</u>	<u>0</u>	<u>0.0</u>	<u>2</u>	<u>1.4</u>	<u>21</u>	<u>1.8</u>
Total	147	100.0	147	100.0	147	100.0	147	100.0	147	100.0	147	100.0	147	100.0	147	100.0	1,176	100.0

Table A. II-3 Buying Experience of the Soy-fortified Bread by Area after the Introduction of the Bread to Nation-wide Distribution

Area	Yes		No		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Suyuri	13	76.5	4	23.5	17	100.0
Washipri	5	62.5	3	37.5	8	100.0
Youido	3	42.9	4	57.1	7	100.0
Dongkyodong	6	66.7	3	33.3	9	100.0
Sungdong	7	70.0	3	30.0	10	100.0
Jangwidong	8	72.7	3	27.3	11	100.0
Banpo	7	53.8	6	46.2	13	100.0
Moraena	9	75.0	3	25.0	12	100.0
Total	58	66.7	29	33.3	87	100.0

Table A. II-9. Attitude on the Price of the Soy-fortified Bread¹⁾

	<u>In comparison with regular bread (A)</u>		<u>In comparison with milk bread (B)</u>		<u>Incomparision with regular & milk bread(A+B)</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Very expensive	0	0.0	1	2.9	1	1.7
Fairly expensive	3	13.0	5	14.3	8	13.8
Reasonable	10	43.5	12	34.3	22	37.9
Fairly inexpensive	8	34.8	10	28.6	18	31.0
Inexpensive	<u>2</u>	<u>8.7</u>	<u>7</u>	<u>20.0</u>	<u>9</u>	<u>15.5</u>
Total	23	100.0	35	100.0	58	100.0

1) Based on those who purchased the bread after the market-wide introduction of it.

Questionnaire Form (I)
(For pre-sales Survey)

1. Dealer No. : _____ 2. Store No. : _____
Respondent's Name : _____
(Name of the head of household : _____)
3. Sex : (1) F _____ (2) M _____
4. What is your status in the household?
(1) Housemaid _____ (2) Housewife _____
(3) Daughter _____ (4) Son _____
(5) Others (If any, please specify it) _____
5. Age : (1) 19 or less _____ (2) 20 - 24 _____
(3) 25 - 29 _____ (4) 30 - 39 _____
(5) 40 or more _____
6. What is the size of your family? (Including housemaid)
(1) 2 to 3 persons _____ (2) 4 to 5 persons _____
(3) 6 to 7 persons _____ (4) 8 persons or more _____
7. What is the occupation of the householder (chief wages earner) in the family?
(1) Managerial and professional _____ (2) Middle management _____
(3) Small entrepreneur _____ (4) Clerical _____
(5) Sales worker and technician _____ (6) Worker _____
(7) Others (If any, please specify it) _____
8. To what extent does your family take bread as a meal?
(1) More than once a day _____ (2) 3 times a week _____
(3) Once a week _____ (4) Rarely eat bread _____
(5) Do not eat at all _____

9. To what extent does your family take bread as snacks?
- (1) More than once a day _____ (2) About 3 times a week _____
(3) More than once a week _____ (4) Rarely eat bread _____
(5) Do not eat at all _____
10. How many loaves of bread does your family buy in a week?
(Unit : In loaf)
- (1) 0.5 or less than 0.5 _____ (2) More than 0.5 to 1 _____
(3) More than 1 to 1.5 _____ (4) More than 1.5 to 2 _____
(5) More than 2 to 3 _____
11. Where do you usually buy bread?
- (1) At neighborhood food store _____
(2) Nearby supermarket _____ (3) At neighborhood bakery _____
(4) At famous bakery _____ (5) Home delivery by milk man _____
(6) At market place _____ (7) Irregular _____
12. Which brand of bread have you bought now?
- (1) Sam Lip regular bread _____ (2) Sam Lip milk bread _____
(3) Conti regular bread _____ (4) Conti milk bread _____
(5) Seoul regular bread _____ (6) Seoul milk bread _____
(7) Others (If any, please specify it) _____
13. What brand of bread does your family enjoy? (You can check more than one)
- (1) Sam Lip regular bread _____ (2) Sam Lip milk bread _____
(3) Conti regular bread _____ (4) Conti milk bread _____
(5) Seoul regular bread _____ (6) Seoul milk bread _____
(7) Neighborhood bakery bread _____
(8) Famous bakery bread _____ (9) Irregular _____
(10) Others (If any, please specify it) _____

14. What is the reason of buying a specific brand of bread?
(You can check more than one)
- (1) Texture _____ (2) Economy _____
(3) Taste _____ (4) Nutrition _____
(5) Freshness _____ (6) Convenience _____
(7) Availability at patronage store _____
(8) Others (If any, please specify it) _____
15. Does your family purchase milk regularly?
(1) Yes _____ (2) No _____
16. If you answered "Yes", on the average how much milk do you purchase. (In pint)
- (1) One _____ (2) Two or three _____
(3) More than four _____ (4) Irregular _____
(5) Take dry milk (excludes dry milk for baby) _____
17. Does your family have a chance to eat noodle or "Ramyon" at home?
(1) Yes _____ (2) No _____
18. If you answered "Yes", how many times do you eat in a week?
(1) Once _____ (2) Twice _____
(3) Three times _____ (4) Occasionally _____
(5) Irregular _____
19. Would you allow us to visit your home for the further similar survey?
(1) Yes, you can _____ (2) No _____

If you answered "Yes", would you tell me your address and telephone number, if you have.

Address : _____

Tel. No. : _____

Questionnaire Form (II)
(For test sales survey part I)

1. Dealer No. : _____ 2. Store No. : _____
Respondent's Name : _____
(Name of the head of household : _____)
3. Sex : (1) F _____ (2) M _____
4. What is your status in the household?
(1) Housemaid _____ (2) Housewife _____
(3) Daughter _____ (4) Son _____
(5) Others (If any, please specify it) _____
5. To what extent does your family take bread as a meal?
(1) More than once a day _____ (2) 3 times a week _____
(3) Once a week _____ (4) Rarely eat bread _____
(5) Do not eat at all _____
6. To what extent does your family take bread as snacks?
(1) More than once a day _____ (2) About 3 times a week _____
(3) More than once a week _____ (4) Rarely eat bread _____
(5) Do not eat at all _____
7. How many loaves of bread does your family buy in a week?
(Unit : In loaf)
(1) 0.5 or less than 0.5 _____ (2) More than 0.5 to 1 _____
(3) More than 1 to 1.5 _____ (4) More than 1.5 to 2 _____
(5) More than 2 to 3 _____ (6) More than 3 to 4 _____
(7) More than 4 _____
8. Does your family purchase milk regularly?
(1) Yes _____ (2) No _____

9. If you answered "Yes", on the average how much milk do you purchase? (In pint)
- (1) 6 _____ (2) 4 - 5 _____
(3) 2-3 _____ (4) 1 _____
(5) Irregular _____
(6) Take dry milk (Excludes dry milk for baby) _____
10. Does your family have a chance to eat noodle or "Ramyon" at home?
- (1) Yes _____ (2) No _____
11. If you answered "Yes", how many times do you eat in a week?
- (1) Three times _____ (2) Twice _____
(3) Once _____ (4) Occasionally _____
(5) Irregular _____
12. How did you get information about the high protein bread?
- (1) Taste of samples _____ (2) Posters in a store _____
(3) A leaflet _____ (4) From other family member _____
(5) From others _____ (6) By chance _____
(7) Others (If any, please specify it) _____
13. What did you know about the high protein bread?
- (1) As an inexpensive bread _____ (2) As an nutritious bread _____
(3) As another kind of bread _____ (4) As another brand of bread _____
(5) As an expensive bread _____
14. How would you think about the price of the high protein bread?
- (1) Inexpensive _____ (2) Fairly inexpensive _____
(3) Reasonable _____ (4) Fairly expensive _____
(5) Very expensive _____

15. What is your intention to buy the high protein bread in future?
(1) Do not buy if priced cheaper _____
(2) Will buy even if priced higher _____
(3) Will continue to buy if priced same _____
(4) Will not buy if priced higher _____
(5) Do not know (undecided) _____
16. Age : (1) 19 or less _____ (2) 20-24
(3) 25-29 _____ (4) 30-39
(5) 40 or more _____
17. What is the size of your family? (Including housemaid)
(1) 2 to 3 persons _____ (2) 4 to 5 persons _____
(3) 6 to 7 persons _____ (4) 8 persons or more _____
18. What is the occupation of the householder (chief wages earner) in the family?
(1) Managerial and professional _____
(2) Middle Management _____
(3) Small entrepreneur _____
(4) Clerical _____
(5) Sales worker and Technician _____
(6) Worker _____
(7) Others (If any, please specify it) _____
19. Would you allow us to visit your home for the further similar survey?
(1) Yes, you can _____ (2) No _____

If you answered "yes", would you tell me your address and telephone number, if you have.

Address : _____

Tel. No. : _____

Questionnaire Form (III)

(For test sales survey part II)

1. Dealer No. : _____ 2. Store No. : _____ 3. ID No. : _____

Respondent's

Name : _____ Address : _____

4. Sexs: (1) F _____ (2) M _____

5. Age : (1) 19 or less _____ (2) 20-24. _____ (3) 25-29 _____

(4) 30-39 _____ (5) 40 or more _____

6. What is your status in the household?

(1) Housemaid _____ (2) Housewife _____

(3) Daughter _____ (4) Son _____

(5) Others (If any, please specify it) _____

7. To what extent does your family take bread as a meal?

(1) More than once a day _____ (2) 3 times a week _____

(3) Once a week _____ (4) Rarely eat bread _____

(5) Do not eat at all _____

8. To what extent does your family take bread as a snack?

(1) More than once a day _____ (2) About 3 times a week _____

(3) More than once a week _____ (4) Rarely eat bread _____

(5) Do not eat at all _____

9. How many loaves of bread does your family buy in a week?

(Unit : In loaf)

(1) 0.5 or less than 0.5 _____ (2) More than 0.5 to 1 _____

(3) More than 1 to 1.5 _____ (4) More than 1.5 to 2 _____

(5) More than 2 to 3 _____ (6) More than 3 to 4 _____

(7) More than 4 _____

10. What day of the week normally do you purchase the bread most?
- (1) Any day _____
 - (2) Weekend and the day before flour eating day (Tu. and/or Fr.) _____
 - (3) Weekend _____
 - (4) The day before flour eating day _____
 - (5) The first day of the week (Mon) _____
 - (6) Irregular _____
11. Where do you usually buy bread?
- (1) At neighborhood food store _____
 - (2) Nearby supermarket _____
 - (3) At neighborhood bakery _____
 - (4) At famous bakery _____
 - (5) Home delivery by milk man _____
 - (6) At a store in marketplace _____
 - (7) Irregular _____
12. What brand of bread does your family enjoy? (You can check more than one)
- (1) Sam Lip high protein bread _____
 - (2) Sam Lip regular bread _____
 - (3) Conti regular bread _____
 - (4) Seoul regular bread _____
 - (5) Sam Lip milk bread _____
 - (6) Conti milk bread _____
 - (7) Seoul milk bread _____
 - (8) Bakery bread _____
 - (9) Irregular and others (If any, please specify it) _____
13. What is the reason of buying a specific bread?
(You can check more than one)
- (1) Texture _____
 - (2) Flavor _____
 - (3) Freshness _____
 - (4) Nutrition _____
 - (5) Economy _____
 - (6) Convenience _____
 - (7) Good keeping quality _____
 - (8) Availability at the patronage store _____
 - (9) Others (If any, please specify it) _____

4. Who normally make a decision to purchase a particular brand of bread in the family ?
- (1) Father _____ (2) Mother _____
(3) Other adult member _____ (4) Secondary school students ____
(5) Primary school children ____ (6) Pre-school children _____
(7) Others (If any, please specify it) _____

15. Where do you normally keep the bread at home?
- (1) Refregerator _____ (2) On dining table _____
(3) Kitchen closet _____ (4) Other place _____

16. How many days do you keep a loaf of bread at home?
- (1) Only the day purchased ____ (2) 2 or 3 days _____
(3) 4 - 6 days _____ (4) More than a week _____
(5) Irregular _____

*How would you react to the price and the quality of bread?

(Please answer on each question)

- | | 17. Expensive but good quality bread | 18. Inexpens: but poor quality |
|---------------------------|--------------------------------------|--------------------------------|
| (1) Will always buy | _____ | _____ |
| (2) Will occasionally buy | _____ | _____ |
| (3) Will rarely buy | _____ | _____ |
| (4) Will not buy at all | _____ | _____ |

19. Concerning the high protein bread, how many times did you buy i
- (1) Just once _____ (2) Two to three _____
(3) Four to six _____ (4) More than once in each week

20. How is (was) it served to your family? (You can check more than
- (1) As plain bread _____ (2) As toast _____
(3) Bread with butter and/or jam _____
(4) As toast with butter and/or jam _____ (5) As sandwich _____
(6) Steamed _____ (7) Irregular _____

* How have your family reacted to the bread?

21. About price

- (1) Very expensive _____ (2) Fairly expensive _____
(3) Reasonable _____ (4) Fairly inexpensive _____
(5) Inexpensive _____

*About quality

In compared to (a) regular bread, or (b) milk bread:

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
22. Flavor	_____	_____	_____	_____	_____
23. Odor	_____	_____	_____	_____	_____
24. Texture	_____	_____	_____	_____	_____
25. Colour	_____	_____	_____	_____	_____

*About other things

26. Package design	_____	_____	_____	_____	_____
27. Shape (Physical design)	_____	_____	_____	_____	_____
28. Thickness of a piece	_____	_____	_____	_____	_____
29. Stickiness	_____	_____	_____	_____	_____

*If you rated very poor, please give us specific reason for it?

30. Which bread does your family like?

- (1) High protein bread _____ (2) Regular bread _____
(3) Milk bread _____ (4) Bakery's bread _____
(5) Likes most of them _____ (6) No definite preference _____
(7) Don't know _____

*Which member of the family like (or dislike) the bread most?

	31. <u>Like</u>	32. <u>Dislike</u>
(1) Father	_____	_____
(2) Mother	_____	_____
(3) Other adult member	_____	_____
(4) Secondary school children	_____	_____
(5) Primary school children	_____	_____
(6) Pre-school children	_____	_____
(7) Others	_____	_____

33. How did you get information about the high protein bread?

- (1) Taste of samples _____ (2) Posters in a store _____
(3) A leaflet _____ (4) From other family members _____
(5) From others _____ (6) By chance _____
(7) Others (If any, please specify it) _____

34. If you saw the poster at a store how was the impression?

- (1) Very impressive _____ (2) Fairly impressive _____
(3) Fair _____ (4) Poor _____
(5) Very poor _____

35. If you saw the leaflet how was the impression?

- (1) Very impressive _____ (2) Fairly impressive _____
(3) Fair _____ (4) Poor _____ (5) Very poor _____

36. Have you read the material written in the leaflet?

- (1) Yes _____ (2) No _____

37. If you answered "yes", how thoroughly read it?

- (1) read all _____ (2) read a part _____
(3) read only headlines _____ (4) I'm not sure _____

38. How do you feel about the high protein bread?
- (1) As an inexpensive bread ____ (2) As a nutritious bread ____
(3) As another kind of bread ____ (4) As another brand of bread ____
(5) As an expensive bread ____ (6) Quality (Poor) ____
(7) Good taste ____
39. What factor(s) may lead you to continue to buy the high protein bread?
- (1) Taste ____ (2) Freshness ____
(3) Texture ____ (4) Nutrition ____
(5) Reasonable price ____ (6) Easily available ____
(7) Others (If any, please specify it) ____
40. If you discontinued to buy the high protein bread, please, state the reasons.
- (1) Poor taste ____ (2) Poor colour ____
(3) Harsh texture ____ (4) Uneconomical ____
(5) Not available ____ (6) Not interested ____
(7) Poor keeping quality ____ (8) No specific reason ____
41. Any further comments on the high protein bread?
- _____
- _____
42. Does your family purchase milk regularly?
- (1) Yes ____ (2) No ____
43. If you answered "yes", on the average how much milk do you purchase? (In half pint)
- (1) One ____ (2) Two or three ____
(3) More than four ____ (4) Irregular ____
(5) Take dry milk (excludes dry milk for baby) ____

44. Does your family have a chance to eat noodle or "Ramyon" at home?
(1) Yes _____ (2) No _____
45. If you answered "yes", how many times do you eat in a week?
(1) Once _____ (2) Twice _____
(3) Three times _____ (4) Occasionally _____
(5) Irregular _____
46. What is the size of your family? (Including housemaid)
(1) 2 to 3 persons _____ (2) 4 to 5 persons _____
(3) 6 to 7 persons _____ (4) 8 persons or more _____
47. How much schooling have you (your housewife) finished?
(1) Primary school _____ (2) Middle school _____
(3) High school _____ (4) Junior college _____
(5) College _____ (6) Others (If any, please specify it) _____
48. What is the size of your residence? (Unit: Phyong)
(1) Less than 15 _____ (2) 15-20 _____
(3) 21-30 _____ (4) 31-45 _____
(5) More than 45 _____
49. What is the occupation of the master (chief wages earner) in the family?
(1) Managerial and professional _____
(2) Middle management _____ (3) Small entrepreneur _____
(4) Clerical _____ (5) Sales worker and Technician _____
(6) Worker _____ (7) Others (If any, please specify it) _____
50. What kind of arrangement has been made for the residence?
(1) We own _____ (2) Leased (with key money only) _____
(3) Leased (monthly rental) _____
(4) Others (If any, please specify it) _____

51. What is the average monthly income of the master (chief wages earner) in the family?

- | | |
|-----------------------------|-----------------------------|
| (1) W 70,000 or less _____ | (2) W 70,001-W100,000 _____ |
| (3) W100,001-W150,000 _____ | (4) W150,001-W250,000 _____ |
| (5) W250,001-W400,000 _____ | (6) W400,001 or more _____ |

Questionnaire Form (IV)
(For non-users survey)

1. Dealer No. : _____ 2. Store No. : _____
Respondent's Name _____ 3. ID No. : _____
4. Sex : (1) M _____ (2) F _____
5. Age : (1) 19 or less _____ (2) 20-24 _____ (3) 25-29 _____
(4) 30-39 _____ (5) 40 or more _____
6. What is your status in the household?
(1) Housemaid _____ (2) Housewife _____
(3) Daughter _____ (4) Son _____
(5) Others (If any, please specify it) _____
7. To what extent does your family take bread as a meal?
(1) More than once a day _____ (2) 3 times a week _____
(3) Once a week _____ (4) Rarely eat bread _____
(5) Do not eat at all _____
8. To what extent does your family take bread as snacks?
(1) More than once a day _____ (2) About 3 times a week _____
(3) More than once a week _____ (4) Rarely eat bread _____
(5) Do not eat at all _____
9. How many loaves of bread does your family buy in a week?
(Unit: In loaf)
(1) 0.5 or less than 0.5 _____ (2) More than 0.5 to 1 _____
(3) More than 1 to 1.5 _____ (4) More than 1.5 to 2 _____
(5) More than 2 to 3 _____ (6) More than 3 to 4 _____
(7) More than 4 _____

10. Where do you usually buy bread?
- (1) At neighborhood food store _____
 - (2) Nearby supermarket _____ (3) At neighborhood bakery _____
 - (4) At famous bakery _____ (5) Home delivery by milk man _____
 - (6) At a store in marketplace _____
 - (7) Irregular _____ (8) Others _____
11. Where do you normally keep the bread at home?
- (1) Refrigerator _____ (2) On dining table _____
 - (3) Kitchen closet _____ (4) Other place _____
12. How many days do you keep a loaf of bread at home?
- (1) Only the day purchased _____ (2) 4-6 days _____
 - (3) 2 or 3 days _____ (4) More than a week _____
 - (5) Irregular _____
13. What brand of bread does your family enjoy?
- (You can check more than one)
- (1) Sam Lip high protein bread _____
 - (2) Sam Lip regular bread _____ (3) Conti regular bread _____
 - (4) Seoul regular bread _____ (5) Sam Lip milk bread _____
 - (6) Conti milk bread _____ (7) Seoul milk bread _____
 - (8) Bakery bread _____ (9) Irregular and others _____
14. Who normally make a decision to purchase a particular brand of bread in the family?
- (1) Father _____ (2) Mother _____
 - (3) Other adult member _____ (4) Secondary school students _____
 - (5) Primary school children _____ (6) Pre-school children _____
 - (7) Others (If any, please specify it) _____

5. How the bread is served at your home? (You can check more than one)
- (1) As plain bread _____ (2) As toast _____
- (3) Bread with butter and/or jam _____
- (4) As toast with butter and/or jam _____
- (5) As sandwich _____ (6) Steamed _____
- (7) Irregular _____
16. What is the reason of buying a specific bread?
(You can check more than one)
- (1) Texture _____ (2) Flavor _____
- (3) Freshness _____ (4) Nutrition _____
- (5) Economy _____ (6) Convenience _____
- (7) Availability at a patronage store _____
- (8) Others (If any, please specify it) _____
17. Does your family purchase milk regularly?
- (1) Yes _____ (2) No _____
18. If you answered "yes", on the average how much milk do you purchase? (In pint)
- (1) One _____ (2) Two or three _____
- (3) More than four _____ (4) Irregular _____
- (5) Take dry milk (excludes dry milk for baby) _____
19. Does your family have a chance to eat noodle or "Ramyon" at home?
- (1) Yes _____ (2) NO _____
20. If you answered "yes", how many times do you eat in a week?
- (1) Once _____ (2) Twice _____
- (3) Three times _____ (4) Occasionally _____
- (5) Irregular _____

21. Did you know the high protein bread?
(1) Yes _____ (2) No _____
22. If you answered "yes", how did you get the information about the bread? (You can check more than one place.)
(1) Posters in a store _____ (2) A leaflet _____
(3) Taste of a sample _____ (4) From other family members _____
(5) From others _____ (6) From radio _____
(7) From TV _____ (8) From newspaper _____
(9) Others _____
23. If you answered "yes", what did you know about the high protein bread?
(1) As another kind of bread _____
(2) As another brand of bread _____
(3) As a nutritious bread _____ (4) As an expensive bread _____
(5) As an inexpensive bread _____
24. If you didn't buy the high protein bread at all, what was the reason?
(1) Because I didn't know it at all _____
(2) Because of the poor quality of the sample _____
(3) Not interested _____ (4) Pleased with other bread _____
(5) Distrust of manufacturer's Ad. _____
(6) Due to purchasing at bakery _____
(7) Because of it's low price _____
(8) Or expensive price _____ (9) Others _____
25. If you tasted the sample, (based on the item #3 of the question #22) what factor(s) led you to decide not to purchase the high protein bread?
(1) Flavor _____ (2) Odor _____

- (3) Texture _____ (4) Colour _____
(5) Price _____ (6) Package _____
(7) Distrust of the Ad. _____ (8) Availability _____
26. If the quality and/or price of the bread were improved, would you try it?
(1) Yes _____ (2) May be _____
(3) Not sure _____ (4) No _____
27. What is the size of your family? (Including housemaid)
(1) 2 to 3 persons _____ (2) 4 to 5 persons _____
(3) 6 to 7 persons _____ (4) 8 persons or more _____
28. How much schooling have you (your housewife) finished?
(1) Primary school _____ (2) Middle school _____
(3) High school _____ (4) Junior college _____
(5) College _____ (6) Others (If any, please specify it) _____
29. What is the occupation of the master (chief wages earner) in the family?
(1) Managerial and professional _____
(2) Middle management _____ (3) Small entrepreneur _____
(4) Clerical _____ (5) Sales worker and Technician _____
(6) Worker _____ (7) Others (If any, please specify it) _____
30. What is the size of your residence? (Unit in Phyang)
(1) Less than 15 _____ (2) 15-20 _____
(3) 21-30 _____ (4) 31-45 _____
(5) More than 45 _____
31. What kind of arrangement has been made for the residence?
(1) We own _____ (2) Leased (with key money only) _____
(3) Leased (monthly rental) _____ (4) Others (If any, please specify it) _____

32. What is the monthly income of the master (chief wages earner) in the family?

- | | |
|-----------------------------|-----------------------------|
| (1) W 70,000 or less _____ | (2) W 70,001-W100,000 _____ |
| (3) W100,001-W150,000 _____ | (4) W150,001-W250,000 _____ |
| (5) W250,001-W400,000 _____ | (6) W400,001 or more _____ |

Questionnaire Form (V)
(For the follow-up mail survey)

1. Respondent's status in the household
 - 1) Housemaid _____
 - 2) Housewife _____
 - 3) Daughter _____
 - 4) Son _____
 - 5) Others (If any, please specify it) _____
2. Have you ever purchased the soy-fortified bread in the last one or two months (After Nov. 20th)?
 - 1) Yes _____
 - 2) No _____
3. If you answered 'No', do you know the soy-fortified bread being sold?
 - 1) Yes _____
 - 2) No _____
- * If you have ever purchased the soy-fortified bread what do you think about it in compared to other bread? (Please check the bread to be compared with)
 - 1) Regular bread _____
 - 2) Milk bread _____
4. About price
 - 1) Very expensive _____
 - 2) Fairly expensive _____
 - 3) Reasonable _____
 - 4) Fairly inexpensive _____
 - 5) Inexpensive _____

* About quality

	(1) <u>Excellent</u>	(2) <u>Good</u>	(3) <u>Fair</u>	(4) <u>Poor</u>	(5) <u>Very poor</u>
5. Flavor	_____	_____	_____	_____	_____
6. Odor	_____	_____	_____	_____	_____
7. Texture	_____	_____	_____	_____	_____
8. Colour	_____	_____	_____	_____	_____

* About other things,

	(1) <u>Excellent</u>	(2) <u>Good</u>	(3) <u>Fair</u>	(4) <u>Poor</u>	(5) <u>Very Poor</u>
9. Package design	_____	_____	_____	_____	_____
10. Shape (Physical design)	_____	_____	_____	_____	_____
11. Thickness of a piece	_____	_____	_____	_____	_____
12. Stickiness	_____	_____	_____	_____	_____

13. How did you get information about the soy-fortified bread?

- 1) Posters in a store _____
- 2) A leaflet _____
- 3) From other family members _____
- 4) From others _____
- 5) Radio _____
- 6) By chance _____
- 7) Others (If any, please specify it) _____

14. What factor(s) may lead you to continue to buy the soy-fortified?

- | | |
|---|---------------------------|
| 1) Taste _____ | 2) Freshness _____ |
| 3) Texture _____ | 4) Nutrition _____ |
| 5) Reasonable price _____ | 6) Easily available _____ |
| 7) Others (If any, please specify it) _____ | |

15. If you discontinued to buy the soy-fortified bread, please, state the reasons.

- | | |
|-------------------------------|-----------------------------|
| 1) Poor taste _____ | 2) Poor colour _____ |
| 3) Harsh texture _____ | 4) Uneconomical _____ |
| 5) Inconvenient _____ | 6) Not interested _____ |
| 7) Poor keeping quality _____ | |
| 8) Not available _____ | 9) No specific reason _____ |

16. If you have some opinions about the soy-fortified bread to point out, please specify it,