



Self-help for a Hungry World

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WONSEONG COUNTY

MODEL NUTRITION EDUCATION PROJECT

3RD ANNUAL EVALUATION

1980

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FEBRUARY 10, 1981

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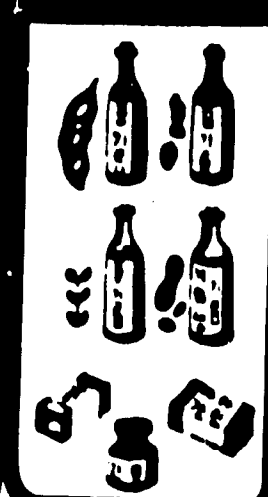
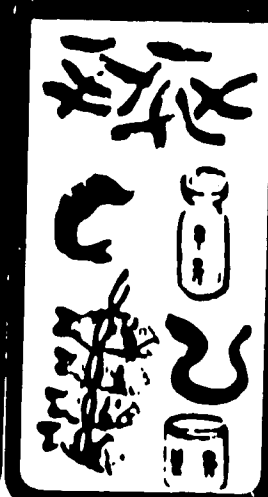
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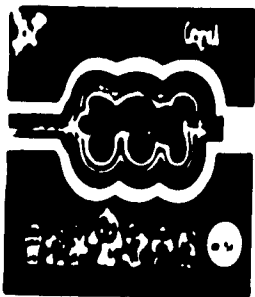
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다키워 후회 말고
어릴때 잘먹이지



백만인의 식량재단
MEALS FOR MILLIONS FOUNDATION/KOREA

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SECTION I: INTRODUCTION

Nutrition is of basic importance to health and international development. It has a direct effect on mortality rates, life expectancy, family size and efficiency and creativity. Korea is a country where overall health and nutrition have improved greatly in the past twenty years; it is rare to find cases of severe malnutrition. Chronic malnutrition, however, still poses a persistent problem in most rural communities. It is caused by an inadequate food supply tradition food consumption habits (lack of knowledge) and low purchasing power.

Meals for Millions/Freedom from Hunger Foundation started an intensive, model nutrition education project in one of Korea's rural counties in 1978 to help improve nutritional status and raise the Korean government's awareness of the role played by nutrition in economic development. The model project focused on the development of a school/community-oriented nutrition education system that aimed to improve diets through a series of simple, unsophisticated training programs based on the theory that learning proceeds in three stages: awareness, acceptance and, finally, behavior change. Working through the existing government organizations, the project sought to demonstrate to the county and national governments that nutrition education should become an integral part of rural community efforts throughout Korea.

This model education project was funded by a three-year Operational Program Grant (OPG) from the USAID mission in Korea; this grant ended December 31, 1980. However, in response to a recommendation included in an evaluation written by

an independent team of Koreans, MFM/FFH will continue its assistance at the Wonseong County and the national government level for two years, and the OPG has been extended through 1981. Meals for Millions/Freedom from Hunger Foundation, therefore, will continue its nutrition education activities in Wonseong County as the government begins to assume a greater responsibility for covering the project's costs and management. At the national level, the Foundation will assist in the replication of the Wonseong County project in another rural area of Korea and the inclusion of nutrition education into Korea's next five-year economic plan slated for 1982.

The following pages outline the project's accomplishments during 1980 in the Wonseong County Model Rural Nutrition Education Project. This project has two major objectives:

1. To provide nutrition education to the total population (approximately 54,000 of Wonseong County in Korea, through a network of training programs and consciousness-raising, and
2. To raise the awareness of the national government regarding the importance of nutrition in general and the effectiveness of this program in particular.

SECTION II: SUMMARY OF ACTIVITIES/1978 AND 1979

The activities for 1978, the first year, focused on increasing the local, county and national governments' awareness of nutrition's role in health and economic development. The second year, 1979, proceeded to assure acceptance of good nutrition, and the third year, 1980, aimed to change long-accepted behavior patterns.

Awareness and acceptance were increased over the first two years, by providing nutrition education to Wonseong County's entire population through an intensive network of training programs, development of printed materials and use of the media. The government program continued through the work of the project's Advisory Committee and a variety of government-related activities. All the efforts have taken place in conjunction with a series of evaluation systems designed to monitor the project's success and act as educational tools for the target population.

A. TRAINING

Several groups received training in nutrition: village social workers, female primary school teachers, the local Homeland Reserve (1978) and Civil Defence Forces (1979) and female Saemaul leaders. In this way the project reached all segments of the population. Through village social workers and female Saemaul leaders (replaced by the Nutrition Improvement Club leaders in 1979), village members received individualized nutrition information. The training program for the local Homeland Reserve and Civil Defense Forces increased male awareness of nutrition's role in family health. Primary school teachers learned about nutrition; they, in turn, taught primary school children.

An important activity in 1979 was the establishment of a Nutrition Demonstration School. This school was a model to other county primary schools. The teachers at the demonstration school attended our regular training sessions and our nutritionists visited the school bi-monthly to conduct further teacher training and help develop teaching materials.

In addition to the above training activities, our staff taught regularly at the Kanahan Farmers Training Institute to disseminate nutrition and project information.

By the end of 1979, the project had reached more than 15,000 people.

B. EDUCATIONAL MATERIALS

Another extremely important activity has been the production of a wide range of printed materials. In 1978 these included: a manual for social workers, a health chart, a nutrition assessment training guide, a pamphlet, a poster and a summary of nutrition lecture materials prepared for the government official's workshop. The manual was particularly useful and is now used throughout Korea. Training materials produced in 1979 were: a slide show on "Guidelines for Better Nutrition" with an accompanying booklet and tape; a flip chart on "What is Nutrition"; pamphlets on "regulating foods," "body building foods," "what is nutrition," "Potato cooking," "energy giving foods," and "the balanced diet"; a poster/calendar to introduce the five basic food groups; several booklets; and four flannel-graphs to accompany the pamphlets. All of the above materials have contributed to the success of this project and have been endorsed by the national government's Ministry of Health and Social Affairs, so they are now used in over 150 health

centers throughout the country. The Korean Dietetics Association and the Salvation Army are also using our materials. (Appendix A is a complete list of where our materials have been sent.)

C. THE MEDIA PROGRAM

Local radio has proved an invaluable tool for disseminating nutrition information. Broadcasts were started in 1978 but became a regular feature of the project in 1979 when we started weekly thirty-minute programs, plus daily five-minute programs. All of these programs stressed simple, practical nutrition information and were important for raising awareness of nutrition and our project.

D. MONITORING

Two monitoring systems have been used by the project to measure nutritional status and serve as educational tools for the staff and the target populations. Anthropometric data (height, weight and arm circumference) are collected every three months by the social workers, while individual dietary surveys are conducted once a year. An important accomplishment during 1979 was the development of a dietary survey format which gives a more accurate determination of the amount of food consumed by individual family members (see Table I). In conjunction with these two systems, Korea University collects anthropometric and dietary data plus parasite and blood information in Wonseong County and an adjacent control area every other year.

In addition to the regular monitoring activities, MFM/FFH's staff prepared two brief surveys in 1979. One survey was to determine whether

people were aware of the project and had accepted that nutrition is important for good health. The answers indicated success on both counts, and that the majority of the population had begun to make some behavior changes. The other survey was used to ascertain whether or not county workers thought this project was important. To the question, "Do you think this project should be continued?" 91% said "yes" and 9% said "no," and to the question "Do you think the knowledge of nutrition is important to the county population and yourself?" 100% said "yes."

E. GOVERNMENT AWARENESS

The task of raising government awareness to nutrition's role in economic development has been an important part of this project. One means has been through the MFM/FFH Advisory Committee made up of members from various government ministries (Education, Health and Social Affairs, and Agriculture) and several national universities (Korea and Seoul National). (See Appendix B for a complete list of members.) The committee met every three months in 1978 and 1979 to assess project activities and give recommendations. The Advisory Committee members have been extremely helpful throughout the life of the project, solving problems as they have arisen, giving advice and transferring information to their various agencies and departments of government.

A government awareness workshop was held in Wonseong County in December 1978. This workshop was attended by national, provincial and county officials and provided a forum for people at the highest government levels to hear from people working at the village level. There was no government workshop in 1979 but MFM/FFH was an active participant in a National Nutrition Policy Symposium held June 5-9, 1979. The project was described during the symposium and,

based on experience, recommendations were made for a national rural nutrition education program. The next five-year plan will be written in 1981, and it is expected that a nutrition policy will be included.

By 1979, MFM/FFH had convinced the Wonseong County government that the continuation of this project was important. At the national level, the government awareness activities continued throughout 1979 and a decision was made to organize an outside evaluation to be conducted in 1980.

F. MISCELLANEOUS ACTIVITIES

Briefly, other activities have been: an art contest for primary school children, a County Nutrition Fair, a Kangwon Province television broadcast, and a workshop on participatory education skills conducted by MFM/FFH's U.S. staff in 1979 and 1980. Both of these workshops were attended by field-level health and nutrition workers. The purpose was to introduce participatory approaches to education which MFM/FFH feels are more effective than didactic approaches in promoting behavior change among adults.

G. PROBLEMS ENCOUNTERED/1978 AND 1979

1. Social workers had a heavy workload and were not able to find adequate time for our project.
2. It was difficult to integrate primary school teachers into the training in 1978 because they lacked the approval of the county education officials. Through the efforts of our Advisory Committee member, the Ministry of Education's School Health Division Chief, we finally were able to conduct four days of intensive training in January 1980.

3. The printed materials have taken longer to prepare and have been more expensive than expected.

SECTION III: ANALYSIS OF 1980

During 1980, the project continued to provide nutrition education to the total population of Wonseong County and moved forward rapidly, taking full advantage of the hard work done previously. Training took place at all levels, a variety of educational materials was produced, and the media program continued. Anthropometric data was collected every three months and a dietary recall survey was conducted.

The raising of government awareness continued to be an important part of the project. A near culmination of this objective came with the preparation of an outside evaluation on the project's effectiveness (see Section III. E., "Outside Evaluation" for a complete discussion). The outside evaluation clearly indicates how much progress we have made over the last three years towards reaching our objectives. The results show there has been substantial behavior change but that it is important for the project to continue with our assistance two more years to assure a lasting effect.

The project has moved out of the "model" phase in Wonseong County and will be replicated by the Ministry of Health and Social Affairs (MHSA) in another rural county. We also will assist the MHSA to develop the nutrition education section of the next five-year economic plan (1982).

A. TRAINING

There are thirty social workers in Wonseong County who participate in our project. Last year they received ten days of nutrition training. These training sessions covered food sanitation, nutrient losses during cooking,

balanced diets, vitamins and minerals, carbohydrates and fats, proteins, and factors affecting good habits. Each social worker is assigned two villages which they visit at least once a month. During these visits they hold group meetings and talk to people individually about nutrition. There are approximately four hundred villages in Wonseong County, so it is not possible to cover each village.

Primary school teachers received a total of eleven days of training, although only nine were scheduled. Topics covered were basic nutrition, nutrition for rural children, the importance of nutrition education and how to develop educational materials. More training was held in 1980 than planned to make up for the lack of training in 1979, and because we were now receiving encouragement from school officials.

A Nutrition Demonstration School (NDS) was chosen in September 1979. This school was a model and stimulus to other primary schools in Wonseong County and now there are nine such schools. All the primary school teachers attend our regular training sessions and our nutritionists visit the NDS's once a month (down from twice a month in 1979) to conduct in-service training for the teachers and help with material development. The NDS's are also serving a daily nutritious snack, conducting a parasite-control campaign by deworming children twice a year and measuring the children's heights and weights twice a year. Starting in April 1980, each of the forty primary schools in Wonseong County were conducting weekly hour-long nutrition education classes in direct response to the training, the teachers' manual we developed, and the County Workshop held in April (see Sections III. B., "Educational Materials," and III. F., "Government Awareness"). Quite an accomplishment, looking back at

the difficulty we had getting a training program for teachers started at the onset of the project (see earlier annual evaluations).

The local Homeland Reserve Forces were not trained in 1980, which was expected when we developed the 1980 schedule. The main reason was our relationship with the government office in charge and the fact that the office was contacted too late in the year to have our nutrition program included in their already-prepared schedule. The Homeland Reserve Forces are managed by the National Ministry of Defense while the Civil Defense Forces come under county jurisdiction where we have more recognition. The Civil Defense Forces (CDF) met three times, once more than proposed. The CDF's received training in June and July on basic nutrition and nutrition's relationship to health. Open discussions were held on what constitutes good nutrition for the mother and child. (The HRF's contain 1,576 men while the CDF's have 6,541 men.)

The Nutrition Improvement Clubs continued to meet and receive training throughout 1980. We met with the club leaders thirteen times last year, at least once every month and twice during August. We had proposed to meet them only twice. The reason we met more than originally planned was because they scheduled, on their own, to meet once a month and we were invited to give lectures and cooking demonstrations. The NIC's have become increasingly more active over the year and have been invaluable in distributing nutrition information to villagers. We distribute printed materials to club leaders who in turn share them with club members. There are approximately 125 NIC's and each of these clubs has ten to twenty members. We met with the club leaders eleven times at the myon level and twice in Wonju. During these meetings, the NIC leaders are encouraged to share their experiences with

each other while we give nutrition information. After each of these meetings, the club leaders hold club meetings to share the information they have received. In this way nutrition information is reaching 1,250 to 2,500 village women each month.

The MFM/FFH staff continued to teach at the Kanahan Farmers' Training Institute as part of our public-awareness program. The students at the Institute come from several different provinces, so they are able to disseminate information about our project. We visited the center three times last year, but probably will not continue as work in the villages increases.

MFM/FFH's training staff reached directly a total of 2,545 people last year. Table II is a breakdown of this training. Table III is a summary of all the proposed and actual training that took place.

B. EDUCATIONAL MATERIALS

Training materials were produced throughout 1980. These included: a manual/textbook for primary school students and teachers entitled "Food and Nutrition"; several short booklets including training materials for school teachers and "body building foods" for school children; pamphlets on "vegetable preservation," "barley cooking," and "balanced menu guide for rural people"; a poster on "Nutrition for Pregnant Women"; flannel-graphs on "food sanitation," "special nutrition," and "diseases coming from malnutrition"; a flip chart on "Guidelines for Infant Nutrition"; and an excellent report on the outside evaluation of this project. See Table IV for a complete list of the 1980 materials.

TABLE II

NUMBER OF PERSONS TRAINED IN EACH COURSE IN 1980

<u>Trainees</u>	<u>Number</u>	<u>Days</u>	<u>Trainer</u>
Social Workers	30	10	MFM/FFH
School Teachers	50	11 (3 times)	MFM/FFH
NIC Leaders	125	13	MFM/FFH
Civil Defense Forces	4,986	1	MFM/FFH
County Gov't Officials	56	1	MFM/FFH
National Gov't Officials	13	1	MFM/FFH
Trainees in Kanahan Farmers Training Institute	761	1	MFM/FFH
Villagers	5,134*	1	MFM/FFH and Social Workers

*2,545 trained by MFM/FFH; 2,589 trained by
social workers

TABLE III

TRAINING DAYS: PROPOSED vs. ACTUAL, 1980

		<u>Days Proposed</u>	<u>Days Actual</u>	<u>Persons/Hours</u>	
January	Social Workers	1 or 2	none		
	School Teachers	3	4	54	24
	NIC	1	1	51	4
February	NIC	none	1	111	4
	Kanahan Farmers' Training Institute	none	1	77	1
March	Social Workers	1	1	27	5
	NIC	1	1	90	4
	County Gov't Officials	1	none		
	Kanahan Farmers' etc.	none	1	46	1
April	Social Workers	1	1	28	5
	NIC	none	1	98	4
	Kanahan Farmers' etc.	none	1	638	1
	County Gov't Officials	none	1	56	6
May	Social Workers	1	1	26	5
	NIC	none	1	402	4
June	Social Workers	1	1	29	5
	CDF	1	1	1519	1
	NIC	none	1	11	3
July	Social Workers	1	1	30	5
	CDF	1	1	3436	1
	NIC	none	1	92	4
	School Teachers	none	4	38	24
August	Social Workers	1	none		
	School Teachers	6	none		
	NIC	1	2	281	10
	CDF	1	none		
September	Social Workers	1	1	30	5
	MFM/FFH Staff	none	2	13	16
	NIC	none	1	79	4
October	Social Workers	1	1	29	4
	Nat'l Gov't Officials	1	none		
	NIC	none	1	70	4
November	Social Workers	1	2	69	14
	NIC	1	1	93	4
	CDF	1	1	31	1
December	Social Workers	1	1	24	4
	School Teachers	none	3	47	24
	Nat'l Gov't Officials	none	1	13	8
	NIC	none	1	67	4
TOTAL DAYS:		36	43		

TABLE IV
EDUCATION MATERIALS PRODUCED IN 1980

<u>Type</u>	<u>Quantity</u>	<u>For Whom</u>
SCHOOL MANUAL		
Food and Nutrition	5,000	Textbook for primary school children/teachers
BOOKLETS		
Training Materials	300 each	Primary school teachers
Workshop Materials	50	National Gov't Officials
Workshop Materials	100	County Gov't Officials
Body Building Foods	5,000	Primary school children
PAMPHLETS		
	10,000 each	
Vegetable Preservation		Villagers
Barley Cooking		Villagers
Balanced Menu Guide for Rural People		Villagers
POSTER		
Nutrition for Pregnant Women	2,000	Villagers
FLANNEL-GRAPHS		
	15 each	
Food Sanitation		Social Workers
Special Nutrition		Social Workers
Diseases Coming from Malnutrition		Social Workers
FLIP CHART		
Guidelines for Infant Nutrition	3,000	Villagers
REPORT		
Evaluation Report (Korean and English)	100 each	Project-concerned organizations

All of these materials are extremely important to the success of this project. For example, the school manual has enabled us to move ahead with our training of the school teachers. Without the textbook/manual, the school teachers were too insecure to conduct nutrition classes. When the manual was finally completed, in October, five thousand copies were printed and distributed to all the primary schools for use by the 4th, 5th, and 6th graders. The flannel-graphs, used by our staff and the social workers when they conduct training in the villages, and the pamphlets, are very popular among the NIC leaders and important when they transfer their knowledge to fellow villagers. The evaluation report has been invaluable in our campaign to raise government awareness.

The only complaint we have ever received regarding the materials is that there are not enough of them. All of the materials have been widely distributed to gain acceptance for nutrition education efforts throughout Korea and for this project specifically. (See Appendix A for a complete list of the organizations and government agencies that have received our materials.)

C. THE MEDIA PROGRAM

A variety of radio broadcasts was prepared and aired in 1979. In 1980 our thirty-minute programs were cancelled because our staff did not have time to prepare more, but the five-minute broadcasts have been repeated daily since April 1979. All of the short broadcasts stress simple, practical nutrition information (food, health and nutrition, food hygiene, cooking losses, etc.) and have been important in raising the total population's awareness of nutrition and our program. They have generated requests for information and visits by

our staff. We did not produce additional short broadcasts in 1980 because we felt there was benefit in repeating the ones we had and because their preparation is very time-consuming. We are planning to develop more in 1981.

In addition to the daily local broadcasts, CBS, a national radio station, toured our nutrition education project in October. During the tour they interviewed our nutritionists, several social workers and NIC leaders. A twenty-minute program was released later that month and aired twice nationally.

D. MONITORING

Two monitoring systems continue to be used to measure nutritional status and serve as educational tools for the staff and village members. One is the collection of anthropometric data and the other is an individual dietary survey. Anthropometric data (height, weight and arm circumference) are collected every three months by the county social workers. Table V shows a comparison of measurements made on pre-school age children in March of 1978, 1979 and 1980. The data being collected are an excellent means of showing the project's success in improving nutritional status. There has been marked improvement in all areas studied.

The new survey form we developed in 1979 is in use and there are no reported problems. Each social worker spends the day with a family to weigh foods and record information. Table VI shows a summary of the data collected in June 1979 and November 1980. The social workers have learned a great deal about how to collect nutrition survey data and its importance.

In addition to the various monitoring systems used by the social workers and out staff nutritionists, we have been fortunate to have the assistance

TABLE V

ANTHROPOMETRIC MEASUREMENTS

PRESCHOOL AGE CHILDREN 2-6 YEARS OLD (WONSEONG COUNTY, KOREA) 1978-1980

AGE (YEARS)	SEX	NO. OF SUBJECTS			WEIGHTS (in kilograms)				HEIGHTS (in centimeters)				ARM CIRC. (in centimeters)			
		1978	1979	1980	1978	1979	1980	STANDARD	1978	1979	1980	STD.	1978	1979	1980	STD.
TWO	M	53	66	42	10.2	12.31	<u>12.20</u>	11.84	77.8	81.98	81.70	85.50	14.7	15.02	14.96	16.3
	F	68	68	33	10.5	10.41	<u>11.18</u>	11.51	75.7	79.34	<u>81.25</u>	84.56	14.2	14.20	<u>15.06</u>	15.9
THREE	M	48	55	66	12.2	12.41	<u>13.66</u>	13.25	85.1	85.79	<u>89.90</u>	91.94	14.4	15.81	15.30	16.2
	F	72	75	56	11.8	12.31	<u>13.57</u>	12.83	84.1	84.79	<u>89.37</u>	90.19	14.2	15.08	<u>15.15</u>	15.9
FOUR	M	55	51	52	13.4	15.81	<u>15.22</u>	14.85	90.9	95.23	<u>97.63</u>	97.91	15.1	16.37	<u>15.92</u>	16.9
	F	40	53	58	13.4	15.05	<u>15.86</u>	14.32	90.99	92.06	<u>95.47</u>	99.60	14.8	15.59	15.08	16.9
FIVE	M	43	55	40	15.1	14.88	<u>16.87</u>	16.71	95.8	104.93	<u>101.95</u>	105.00	15.1	16.51	16.21	--
	F	47	40	50	15.2	15.95	15.52	16.13	96.0	95.28	<u>99.38</u>	103.71	15.1	15.22	<u>15.49</u>	--
SIX	M	25	25	56	16.5	16.96	<u>18.34</u>	18.49	103.4	106.28	<u>106.73</u>	110.58	15.6	16.08	<u>17.05</u>	--
	F	30	24	43	15.1	16.71	<u>17.63</u>	19.88	90.9	99.83	<u>107.59</u>	109.23	15.3	16.78	16.36	--
TOTAL SUBJECTS:		481	512	496												

Legend: _____ = Above standard, _____ = Improvement over last year

TABLE VI
AVERAGE NUTRITION INTAKE PATTERN, WONSEONG COUNTY 1979-1980

	<u>PRESCHOOL CHILDREN</u>		<u>PREGNANT WOMEN</u>		<u>LACTATING WOMEN</u>	
	<u>1979</u>	<u>1980</u>	<u>1979</u>	<u>1980</u>	<u>1979</u>	<u>1980</u>
Calories (Cal)	741	926	2013	2130	2629	2400
Protein (g)	27.3	26.4	60.7	48.1	95.0	91.8
Fat (g)	9.9	8.9	24.9	26.0	69.8	60.4
Calcium (mg)	176	240	509	726	719	815
Iron (mg)	3.3	8.1	14.5	15.4	13.2	16.1
Vitamin A (I.U.)	888	2100	3869	5400	3172	7000
Vitamin B ₁ (mg)	0.37	0.40	1.57	0.82	1.45	0.88
Niacin (mg)	9.26	7.40	17.1	14.1	20.0	17.2
Vitamin C (mg)	37.9	28.0	92.0	55.0	86.0	80.1
No. of Subjects:	6	31	6	9	14	10

of Korea University's Department of Nutrition and Biochemistry in both Wonseong County and in an adjacent control village. This group collected baseline anthropometric and dietary data in 1978 and comparative data in 1980. (See Table VII for the anthropometric information and Tables VIII and IX for the dietary information.) This information became part of the outside evaluation also conducted last year.

E. OUTSIDE EVALUATION

Between June and September of 1980, an outside evaluation was conducted by an independent team of Koreans appointed by our Advisory Committee and funded jointly by the Wonseong County government and MFM/FFH. The committee consisted of:

Hong-Sik Cheigh	- Chairman of Committee, Korea Institute of Science and Technology
Jin-Soon Ju	- Korea University
Sung-Kya Chun	- Office of Rural Development
Myong-Yoon Park	- UNICEF/Korea
Gyung-Goo Choe	- ASI Market Research/Korea
Hong-Bo Kim	- Secretary

The comprehensive evaluation written by the above committee was completed in September and states that the project has brought about changes in nutrition knowledge, attitude and behavior, plus contributed to the improved nutritional status of county residents. When tested, the people of Wonseong County were more knowledgeable than a control group about topics such as high-protein foods, weaning foods and the criteria for choosing a snack food. Wonseong County residents were also more likely to believe nutrition education was

TABLE VII
ANTHROPOMETRIC MEASUREMENTS
PRESCHOOL AGE CHILDREN 2-6 YEARS OLD (WONSEONG COUNTY, KOREA)
1978 vs. 1980

AGE (YEARS)	SEX	NUMBER OF SUBJECTS		WEIGHT (kg)		HEIGHT (cm)		ARM CIRC. (cm)		NUMBER OF SUBJECTS		WEIGHT (kg)		HEIGHT (cm)		ARM CIRC. (cm)	
		1978	1980	1978	1980	1978	1980	1978	1980	1978	1980	1978	1980	1978	1980	1978	1980
TWO	M	15	14	11.1	11.0	82.5	82.0	15.4	15.1	1	7	--	11.4	--	83.4	--	15.3
	F	21	14	11.2	11.5	82.6	82.5	15.2	14.7	0	6	--	10.6	--	77.9	--	14.5
THREE	M	22	18	12.4	13.0	88.9	90.0	15.5	15.6	9	5	13.6	13.6	91.3	87.9	15.3	15.5
	F	17	18	12.4	12.7	90.3	90.0	15.1	15.4	5	4	12.7	14.5	88.3	93.3	15.5	15.9
FOUR	M	20	26	13.9	15.5	93.7	97.7	16.1	16.0	4	3	15.0	14.8	96.8	92.7	16.2	16.0
	F	17	25	13.7	14.2	94.4	96.5	15.2	15.4	6	3	13.5	14.0	94.3	97.0	15.8	17.6
FIVE	M	19	13	15.8	15.9	100.8	100.8	16.2	15.8	0	0						
	F	14	0	15.4	--	103.0	--	16.0	--	0	0						
SIX	M	4	0	16.2	--	105.2	--	16.0	--	1	0	20.9	--	112.0	--	17.2	--
	F	4	0	15.1	--	99.7	--	15.8	--	1	0	15.4	--	102.0	--	15.0	--
		----- SURVEY GROUP -----							 CONTROL GROUP							

TABLE VIII
DAILY FOOD INTAKE PER CAPITA, 1978 vs. 1980
(in grams)

Food	Project Village		Control Village	
	1978	1980	1978	1980
CEREALS				
Rice	337	320	343	310
Barley	31	43	14	28
Wheat	49	47	55	44
Corn	6	1	10	0
Sorghum	1	0	1	0
Millet	0	1	2	0
Sugar	0	2	0	2
LEGUMES	18	18	28	17
POTATOS	106	105	111	72
VEGETABLES				
Fresh	174	212	176	172
Processed	59	96	67	67
FRUITS	41	30	45	12
SEA WEEDS	2	1	0	5
MEAT	13	22	4	11
EGGS	4	11	4	11
FISH				
Fresh	9	18	15	22
Processed	6	6	14	15
MILK PRODUCTS	1	7	1	9
FAT AND OIL	4	7	3	8
SEASONINGS	27	30	33	26
MISCELLANEOUS	<u>6</u>	<u>2</u>	<u>32</u>	<u>2</u>
TOTALS:	894	970	958	833

TABLE IX

DAILY NUTRIENT INTAKE PER CAPITA, 1978 vs. 1980

	Project Villages		Control Villages	
	1978	1980	1978	1980
CALORIES (Cal)	1810.00	1834.00	1857.00	1704.00
PROTEIN (g)	52.50	57.00	55.60	54.00
FAT (g)	14.20	20.00	13.90	19.00
CALCIUM (mg)	332.00	375.00	335.00	358.00
IRON (mg)	13.50	12.00	15.70	12.00
VITAMIN A (I.U.)	3628.00	4020.00	3212.00	3641.00
VITAMIN B ₁ (mg)	1.13	1.30	1.22	1.05
VITAMIN B ₂ (mg)	.83	1.17	.96	1.02
NIACIN (mg)	67.70	14.00	63.50	44.00
VITAMIN C (mg)	18.80	14.00	27.00	11.00

important and beneficial. This better knowledge was translated into improved diets. A 24-hour recall showed that the daily average intake of nutritious foods by preschool children and pregnant and lactating mothers in the county was better quantitatively and qualitatively than their control group counterparts. In particular, the county mothers took in almost double the amounts of dairy products, vegetables and fruits.

The Committee found that local community leaders and county residents felt the project was successful and hoped to see it continue. In their report, the committee stated the project provided useful guidelines for planning future nutrition education projects. They noted several important accomplishments:

- Production of 20 "effective" educational aids
- Education and use of Social Workers
- Organization of Nutrition Improvement Clubs
- Recognition of the need for close collaboration between
top-level planners, staff workers and villagers

Finally, the committee recommended the project be extended for two years, and be used as a model for nutrition education projects in other parts of the country.

Note that the information collected during the outside evaluation replaced the two brief surveys prepared by our staff in 1979 to assess how much behavior change we were beginning to see within the target population, and to ascertain whether or not county workers thought our program was important (see annual evaluation for 1979).

In the first instance the evaluation report notes on page 117 that:

It is encouraging that 51-58% of the people in Wonseong County said that "the nutrition education was useful and productive in their dietary life" and that 93% of the housewives and 79% of the CDF members expressed their desire to "attend again" the class of the nutrition education. Social workers in charge of nutrition improvement also expressed the same encouraging opinions. Therefore, the nutrition education has brought about a positive result in the improvement of knowledge, attitude (acceptance) and behavior related to the nutrition status.

Later, on page 126, it is reported that:

*In a questionnaire, 80.7% of the social workers said that "the project was very/considerably successful" and 93.59% of the social workers made a positive comment on the result of the project and extension/continuation of the project. The above public opinion could be summed up that
1) Wonseong County Model N.E. Project was successfully carried out and that 2) such project is expected to be continued and extended in coming years.*

We will continue our involvement in the project at the county level for two more years, help the national government replicate this project in another rural county, and assist with the development of the nutrition education component of the next national five-year plan scheduled for 1982.

F. GOVERNMENT AWARENESS

In addition to the plan mentioned above, two government workshops were held in 1980. One at the Wonseong County level aimed at solidifying the primary school teachers' support for our project. Fifty primary school principals were invited to this workshop held in April. The main topic was the necessity of having a nutrition program at the primary school level. As an outcome to this workshop, the principals returned to their schools and encouraged teachers to participate in our project. As a direct result,

all the country's primary schools are now involved in the project and the number of NIC's has increased from one to nine.

We also held a National Government Workshop on December 17, 1980. Thirteen provincial government officers in charge of provincial level nutrition programs participated. The Wonseong County project was discussed as were plans for a national government nutrition policy. The participants were extremely attentive, expressed interest in having our assistance during 1981 and were anxious to take part in any plans we might have to expand nutrition education activities into other parts of Korea. This workshop served as an excellent backdrop for our 1981 activities.

The Advisory Committee met four times as planned. They advised and consented on activities and carried information to their respective agencies and departments of government. They served an important role in organizing the outside evaluation which was conducted over a four-month period last year. Without their assistance this important evaluation would have been much more difficult to orchestrate. Dr. Cheigh, a member of our Advisory Committee and chairman of the Evaluation Committee, particularly deserves our gratitude.

G. MISCELLANEOUS

Nineteen-eighty was an extremely busy year. In March, our staff decided to start nine nutrition demonstration villages which they (in addition to the social workers) visit at least once a month. These villages are models and showplaces for outside people visiting our project. We meet with NIC leaders and male village leaders in these villages to help them plan nutrition activities which they in turn carry out. Also, MFM/FFH's nutritious snack food is readily available for sale and consumption.

Last year, two villages in neighboring Heong-Seong County were chosen to be included in some of our nutrition education activities. Our nutrition educators visit these villages once a month and distribute educational materials. These villages will now be evaluated for the impact of this limited exposure to nutrition information.

In September and October, the county government organized a Mobile County Unit to visit the nine county myons over a twelve-day period. All of the county offices were represented and our project staff was included. We distributed educational materials, information about the project and gave dietary counselling.

In November we organized an observation tour for thirty social workers and nine NIC leaders. This was a one-day tour to observe the dairy plant and women's clubs in Pyangchang County. The tour was meant to be educational and to show our appreciation for all the hard work the social workers and NIC leaders have put in over the past year.

Several contests were held in 1980. As a continuation of the painting contest held the previous year, when fifty-two paintings were submitted, there was an exhibition at nine myon schools. Education authorities evaluated the exhibit and commented that it raised children and mothers' interest in nutrition. This year we conducted another school painting contest. One hundred and forty-four pictures were submitted from seventeen primary schools. Seventy of the best pictures were chosen for exhibit and are now being shown at nine selected myon-level schools. The awards ceremony was held jointly by MFM/FFH and the Wonju Education Board in December, at the opening for the school teachers' nutrition training session. The paintings this year showed

a better appreciation for nutrition and covered a wider variety of topics.

A county Nutrition Fair was held for 125 NIC leaders in August. At this fair four villages were selected out of eleven participating villages as excellent examples of what can be done to improve nutrition within rural villages. Each village was evaluated by our staff for the number of nutrition classes held, the number of people attending these classes, the number of volunteers in the village and the villages' relationship with their social worker. In addition, the villages were judged by the oral and written reports of the NIC leader, the response of the audience to the oral report, and the ease of replication. Each village was then judged by a screening committee and the "excellent" villages were presented citations and prizes; the first prize was a portable oven.

A county Nutrition/Cooking Fair was held in November. A total of 199 different recipes was exhibited including canned vegetables, weaning foods, Korean type bread, and dried vegetables. Seven of these dishes were selected as the "best" by a committee which included the President of Sudo Cooking School and professors for Seoul Health Jr. College and Korea University. A total of 623 housewives visited the exhibit (see Appendix C for several of the recipes).

Another event of the year was the MFM/FFH Second Annual Nutrition Education Teaching Techniques Workshop conducted by MFM/FFH's U.S.-based nutritionist. The workshop was held September 29th and 30th in Wonju at the MFM/FFH food plant. It was attended by thirteen people, all of whom work in health and nutrition in the rural areas of Korea. The purpose of

the workshop was to introduce those attending to participatory approaches to education. Nearly all the education in Korea is delivered in a didactic manner which we do not feel is the most effective way to promote behavior change among adults. The workshop took place over a two-day period which is only long enough to introduce concepts and stimulate interest. Comments following the workshop clearly indicated an interest in this type of training and that it can be useful at the village level in Korea.

H. PROBLEMS ENCOUNTERED IN 1980

1. Training

In general 1980 was a very good year, without the problems encountered the year before. In most cases we actually held more training sessions than planned. The social workers are more interested and committed to the project but it is still difficult for them to find enough time. By 1981 we foresee this may not be as great a problem because the national government's MHSA will be taking a more active role in the management of the project. Before, the social workers did not feel comfortable about spending a great deal of time on a project managed by a U.S.-based private organization.

At the onset of the project we found it difficult to fully integrate the primary school teachers into the project, but after the county workshop held last April, this was no longer the case. School teachers, like the social workers, did not always have adequate time. Since the county Education Board has become more involved in the project, this is not a problem.

The NIC leaders received considerably more training in 1980 than was proposed. The only problem we had was covering the lunch expenses when the meetings went over the lunch hour. As last year, we made food available at those meetings by planning a cooking demonstration. We expect that by 1981, the club members will be able to share some of the costs for these cooking demonstrations, using money the clubs are earning through the sale of MFM/FFH's snack food and communal labor projects. This year the NIC's have covered the travel costs of their leaders when they have had to travel to training sessions.

2. Educational Materials

The biggest problem we had in 1979 was the production delay of the manual needed for school teachers. We predicted the manual would be printed in March 1980, but it was not ready for distribution until October. We had a problem with the Ministry of Education (MOE) because they promised to help publish the manual as a joint venture. Ultimately the Ministry was not able to assist because of a policy prohibiting their name being put on materials developed by others. However, the manual was reviewed by the MOE, school teachers, and the Wonju Education Board's supervisor, among others. The manual is finally in use as a nutrition textbook for primary school children.

Some printed materials are needed specifically for the Homeland Reserve Forces and the Civil Defense Forces if we want to make that training more interesting. Budget constraints are our biggest problem in all areas of material development.

Finally, a slide-tape documentary was scheduled for development in 1980 but, oddly enough, all the slides were stolen (nutrition may be a sexier subject than we have thought).

3. The Media Program

The thirty-minute programs we developed are no longer being aired but we do not see this as a serious problem because the preparation of these programs was extremely time-consuming. Additional five-minute programs are being developed for 1981.

4. Monitoring

We ran into a few problems monitoring the project last year. Some of the families moved so the numbers we actually measured were somewhat lower than in previous years. There were also some mothers who objected to having their children measured. The equipment we are using is in disrepair or simply inadequate, so money should be set aside in 1981 to rectify this.

5. Staff Changes

This project has been blessed by excellent staff since its conception. We were particularly fortunate in the person we found to supervise the project from Seoul, Ms. Jung, Chun Hyang. She worked on the project in 1978, 1979 and half of 1980, but left in June to emigrate to the United States. We were fortunate to find an able replacement, Ms. Chung, Chin Young. Shortly before Ms. Jung left, one of our county nutritionists quit but was quickly replaced. In June, as Ms. Jung was departing, our other county nutritionist left, but he also was quickly replaced. So in a period of under two months we had a complete staff turnover. Since

June, we lost yet another of our county nutritionists. We now seem to have a strong team in Mr. Shin and Ms. Jang at the county level and Ms. Chung in Seoul who will work with the MHSA and MFM/FFH in 1981 and 1982.

Even with many staff changes in 1980, I think we accomplished a great deal. This is because we have been able to attract dedicated people and the project is well-managed, with clearly-stated goals and objectives.

SECTION IV: PLANS FOR 1981

To follow through on the recommendations of the outside evaluation and a request from the county government, MFM/FFH is proposing to continue its activities in Wonseong County. The county government will give more assistance and the national government's Ministry of Health and Social Affairs (MHSA) will begin to take an active role. The goals, objects and activities remain the same. At the national level we have been asked to assist the government in accomplishing its goal of replicating our Wonseong County project and adding a nutrition education component to the next five-year economic plan.

The following pages briefly describe our plans, at the county level, for 1981.

A. TRAINING

The social workers will receive four days of training next year. The training will continue to stress basic nutrition information which they can transfer to villagers during their monthly visits. Besides the tasks performed last year, they will take over the management of the nine Nutrition Demonstration Villages started in 1980 by the MFM/FFH staff.

School teacher training became a regular activity and will continue. The teachers from the Nutrition Demonstration Schools will receive training six times at the myon level. When the school teachers receive this training, the primary school children's mothers will be included because the training will be given during evening parent-teacher meetings. In this way, the training will be more relevant to family needs. In August, during the school vacation, all the primary school teachers will participate in a three-day

workshop. All the training will center around the importance of nutrition to health and family, why it is important to start nutrition education in primary school and how best to teach nutrition to primary school students. The training will also instruct how to use the school textbook/manual we produced last year.

The Nutrition Improvement Club leaders will receive a total of seven days training in 1981, four times at the myon level and three times as joint training with the social workers. These leaders share their knowledge with the members of the Nutrition Improvement Clubs. The members, in turn, meet with their neighbors on an informal basis to discuss nutrition.

Our project staff will meet people at the village level nineteen times in 1981, six times during parent-teacher meetings, seven times with the NIC leaders, and six times during regular village meetings.

We hope to continue meeting with the Civil Defense Forces and the Homeland Reserve Forces but to-date there is no schedule for this. The training will continue to stress the importance of nutrition to family health, and include information on how to get a balanced diet on a low income.

Table X is a summary of the training planned for 1980.

B. EDUCATIONAL MATERIALS

We are planning to produce one pamphlet in 1981 and reproduce other materials developed since 1978. A wide variety of materials has already been created, so it is reasonable to begin reusing them. The expense of producing more new materials is prohibitive.

TABLE X

WONSEONG COUNTY CONTINUATION PROJECT
1981 PROPOSED ACTIVITY SCHEDULE BY MONTH

<u>Trainee/Activity</u>	<u>Month</u>												<u>Total Days</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	
*NIC Leaders	x	x		x			x	x	x			x	7
*Model NDS Teachers and Mothers	x	x		x	x					x		x	6
*Social Workers			x		x		x		x				4
*Villagers	x		x				x	x	x			x	6
*School Teachers								x					2-3
*CDF				x	x					x			1 (3 times)
Advisory Committee Meeting			x			x			x			x	4
Anthropometric Measurements			x			x			x			x	4
Dietary Survey						x							1
County Cooking Fair												x	1
School Contest							x						-
Pamphlet Production (one type)										x			-

*Trainer: MFM/FFH

C. THE MEDIA PROGRAM

This year, 1981, we will prepare a new set of five-minute broadcasts once again stressing simple, basic nutrition information. These messages are aired daily.

D. MONITORING

Project monitoring will continue on a regular basis. Anthropometric measurements of pre-school children and pregnant and lactating women will be taken every three months by the county social workers. These measurements have been useful education tools for the social workers when they are showing the relationship between nutrition, growth and health. A dietary survey is scheduled for June. The survey data have been extremely useful and will continue to serve as educational tools and monitoring devices. Korea University collected baseline data in 1978 and comparative data in 1980 which made up an important part of the total project evaluation conducted last year. Korea University will no longer collect data and we will rely on the county social workers. We feel the social workers have acquired the skills necessary to collect accurate data and that they have more ready access to village families than outside evaluators.

E. MISCELLANEOUS ACTIVITIES

Several activities are planned for the next year which fall outside activities already reported. We propose to continue the County Fair and the school centest, both of which are becoming regular project features. The County Fair will be a cooking contest and the school contest will be an essay devoted to good nutrition. The County Fair and school contest

have been enjoyed greatly and continue to raise awareness and acceptance of nutrition's role in the family. Believing that learning should be fun, we will continue these activities.

F. GOVERNMENT AWARENESS

At the county level we feel we have accomplished our objectives. County officials are aware of the project and accept its importance. The Director of the Model Nutrition Project (county staff) took over the responsibility of supervising the nutrition education activities at the end of 1980. He will work closely with the county government, the national Ministry of Health and Social Affairs and Meals for Millions/Freedom from Hunger Foundation during 1981 and 1982. He was assigned a Nutrition Officer (county staff) to help coordinate all the county activities, plus the county has supplied funds for the salary of one senior nutritionist to work on the project. Meals for Millions/Freedom from Hunger Foundation is continuing its involvement in the project for two more years and will be funding one nutritionist in Wonseong County to work with the county's nutrition education staff.

Our efforts at the national level have also been successful, thanks in a great part to our Advisory Committee and the results of the outside evaluation finished over the summer. The national government has two major objectives for the next two years:

1. To replicate the MFM/FFH Wonseong County Model Nutrition Education project in another county, and
2. To develop a national nutrition plan.

The first objective will be accomplished by: (1) strengthening the Ministry of Health and Social Affairs by adding one senior nutritionist to their staff (this nutritionist will come from the MFM/FFH project); (2) training primary school teachers in nutrition who will then provide nutrition education to selected feeding schools (schools attended by low-income children and serving free meals); (3) training multipurpose health workers in nutrition who will then teach families individually and at group meetings; (4) teaching nutrition to Civil Defense Forces during group meetings and (5) adding a senior nutritionist at the provincial level and training this person, along with the provincial Subsection Chief, to take over the coordination of nutrition activities at the county level.

The second objective will be accomplished primarily through the efforts of the MHSA but with the assistance of MFM/FFH. The Ministry of Health and Social Affairs will be responsible for analyzing nutrition programs already functioning in Korea and putting them together into a nationwide plan. They will also train provincial government officials to conduct nutrition programs and, finally, monitor the program's effectiveness.

Our government awareness program, therefore, has been successful at both levels.

SECTION V: CONCLUSIONS

This project has been functioning in Wonseong County, Korea for three years and has progressed much as planned. Learning is a long-term process and three years has proven adequate time for laying a strong foundation. The results of the 1980 outside evaluation clearly show the importance of our work at the county level and its potential for the whole of Korea. The evaluation indicates our project has nearly universal recognition in the county and families accept the importance of nutrition for health and well-being. It also shows we have made excellent progress towards accomplishing our goal of having families put nutrition knowledge into practice. On the basis of recommendations made in the outside evaluation and requests from the county and national governments, we will continue our involvement. We will help manage the Wonseong County project and help the national government replicate the nutrition education project plus develop the nutrition education component of Korea's next five-year plan.

It took nearly eighteen months to organize all the levels of training we felt were necessary. At the onset, nutrition was a new subject to the various groups we wanted to include. For example, it took time to acquaint the social workers with nutrition and even after they were interested in the subject, it was difficult for them to find adequate time and to add nutrition teaching to their already busy schedules. This would indicate that you cannot expect community groups to have nutrition as an identified need. You must begin where the people are and work slowly towards your goal. The social workers now feel they have more time to devote to this project. There are several reasons for this. First of all, nutrition is more important to them. Also, the project is now being managed by county personnel; previously it was

difficult to justify time spent on a project outside normal activities. Much of our training with villagers is now being handled by the social workers. This is what you would expect if training trainers is effective. Now the trainees are doing the training, a process that has taken three years.

The educational materials have played an important role in preparing others to take over the training. Without nutrition information available in the form of posters, pamphlets, flip charts, manuals, etc., the social workers and primary school teachers felt too insecure to teach on their own. Materials' development is time-consuming and costly, but extremely important.

The media, particularly the radio, have proven invaluable. At the project's onset we were uncertain what role the media would play. We discussed using television but decided not enough families had access to sets, and the production of shows in terms of time and money was too costly. Radios, on the other hand, are readily available and less expensive to use. A recent survey counted 12,636 radios in Wonseong County out of a total population of 68,000 and 13,123 households. Television coverage is not nearly so high, with 5,598 sets. Our experience shows radio to be an excellent medium for raising awareness but not one that leads directly to behavior change without collaborative efforts like face-to-face training.

Training people how to do nutrition assessment, let alone understand its importance, is difficult. It took the first two years of the project to develop a useful format and then train people to use it. We want to stress the value of collecting data and using it for the target population's benefit

but also that it is not easy to collect accurate data. Training is absolutely necessary.

Government awareness has been important on two levels: to assure the project's continuation in Wonseong County and encourage national government officials to include nutrition education in the next national plan. We have been successful at both levels and will continue our involvement to assure plans are carried out as discussed.

We are proud of this project: our staff, the materials produced and the understanding of nutrition we are promoting. Several things seem important to recommend to others doing nutrition education.

1. Training that reaches all levels of the population and stresses simple information related to family issues like health and economics.
2. Printing a wide variety of basic teaching materials.
3. Using radio as a means to raise awareness.
4. Conducting simple educational evaluations using project personnel.
5. Sharing evaluations with your target population.
6. Training trainers who can take over the actual functioning of the project.
7. Using participatory teaching techniques.

8. Having an Advisory Committee made up of informed and concerned local people.
9. Arranging for an outside evaluation.
10. Managing by clearly stated goals and objectives.

We have learned a lot from our involvement in this project, and feel fortunate to have had the opportunity.

APPENDIX A: NUTRITION EDUCATIONAL MATERIAL DISTRIBUTION

A. GOVERNMENT MINISTRIES CONCERNED

Presidential Office	Secretary for 2nd Political Affairs
Economic Planning Board	Minister Director, Economic Planning Bureau Director, Financial Bureau Chief, 1st Investment Division Chief, 4th Investment Division
Ministry of Home Affairs	Minister Director, Financial Bureau Director, Local Affairs Bureau Chief, Saemaul Guidance Division
Ministry of Education	Minister Director, Primary Education Bureau Director, Social Athletic Bureau Director, School Inspectors' Office Chief, School Health Division
Ministry of Agriculture and Fisheries	Minister Assistant Secretary, Increase of Production Director, Food and Grain Bureau Director, Planning Controller Chief, Research Division
Ministry of Health and Social Affairs	Minister Director, MCH Director, Women & Children Bureau Director, Social Affairs Bureau Chief, National Nutrition Division
Ministry of Science & Technology	Director, Technical Cooperation Bureau
Office of Rural Development	Administrator Director, Guidance Bureau Director, Rural Nutrition Improvement Research & Training Institute Chief, Home Improvement Division
Kangwon Provincial Office	Governor Director, Health & Social Affairs Bureau
Kangwon Provincial ORD	Administrator Director, Guidance Bureau

Wonseong County Office
County Chief
Chief, Home Affairs Division
Chief, Rural Guidance Office (ORD)
Chief, Public Health Center
Chief, Nutrition Office

Wonseong County Education Office
Superintendent
Director, Educational Affairs Bureau

B. GOVERNMENT AND PRIVATE INSTITUTES

National Public Health Research Institute
Director
Chief, Training Bureau

Korea Health Development Institute
Director, Public Health Affairs Bureau

Korea Institute of Science and Technology
Chief, Food Technology Laboratory
Chief, Food Grain Technology Laboratory

Korea Development Institute
Dr. Dong Hyun Kim

Korea Red Cross
Director, Public Health Affairs Bureau

Korea Nutrition Society
Chairperson

National Agricultural Cooperative Federation
Director, Saemaul Affairs Bureau
Director, Kangwon Provincial NACF
Director, Wonju-Wonseong NACF

FAO Korea Association
Director, General Affairs Bureau

Radio & TV Stations, KBS, MBC, TBC, DBS, CBS
Director, Radio & TV Program Arrangement Bureau

Kangwon Daily Press
Director, Editing Bureau

Wonju Christian Hospital
Director

Ildong Medicine Manufacturing Company
President

Dongah Medicine Manufacturing Company
President

C. FOREIGN GOVERNMENTS AND PRIVATE AGENCIES

USAID/K
Program Director

UNDP
Representative in Korea

UNICEF

Representative in Korea
Communication Officer
Health and Nutrition Officer

CDF

Representative in Korea

International Human
Association Program, Inc.

Mr. Carroll B. Hodges

Maryknoll Sisters

Sr. Margaret Ann

Columban Sisters

Sr. Juliana O'Neill

The Salvation Army

Captain Peter J. Wood

Korea Union Mission of
Seventh Day Adventist
Welfare Service, Inc.

Dr. D. C. Keith, Sr.

The Asia Foundation

Mr. Ben Kremenak

World Mission of the
American Methodist Church

Reverend Park

Christian Children's Fund Inc.

Dr. Cha Youn-Keun

Korea Mission-Presbyterian
Church in USA

Reverend John V. Moore

Korea National Commission
for UNESCO

Mr. Kim Kyu-Taek

World Health Organization (WHO)

Dr. Alexander M. Rankin

D. COLLEGES

Seoul National University

Dean, Home Economics College
Dean, Agricultural College
Dr. Chai, Byom Suk - Professor
Medical College

Ehwa Women's University

Dean, Home Economics College

Yunse University

Dean, Home Economics College

Sookmyung Women's University

Dean, Home Economics College

Chungang University

Dean, Home Economics College

Hanyang University

Dean, Home Economics College

Kunkuk University	Dean, Home Economics College
Korea University	Dean, Home Economics College Dr. Whang, Woo Ik - Professor, Medical College
Kyunge University	Dean, Home Economics College
Sungkyunkwan University	Dean, Home Economics College
Sejong University	Chief Professor, Food & Nutrition Dept.
Kyunggi College	Chief Professor, Food & Nutrition Dept.
Ducksung Women's College	Chief Professor, Food & Nutrition Dept.
Myungy College	Chief Professor, Food & Nutrition Dept.
Sangmyung Women's Education College	Chief Professor, Food & Nutrition Dept.
Seoul Women's Education College	Chief Professor, Food & Nutrition Dept.
Sungsim Women's College	Chief Professor, Food & Nutrition Dept.
Seoul Health Junior School	Principal
Kanahan Farmers' Training School	Principal

E. NATIONAL CONGRESS HEALTH AND SOCIAL COMMITTEE

Chairperson	Mr. Chung, Byung Hak
Members	Mr. Ham, Myung Soo Mrs. Kim, Yung Ja Mrs. Yoon, Yu Hoon Mr. Lee, Myung Choon Mr. Choi, Tae Ho Mr. Chung, Heuy Sub Mr. Nam, Jae Hee Mr. Moon, Tae Joon Mr. Lee, In Keun Mr. Chang, Yung Soon Mr. Park, Yong Man Mr. Ko, Heung Moon Mr. Kim, Yoon Duck Mr. Kim, Jong Ki Mr. Son, Joo Hang Mr. Kim, Pok Yung

F. AGRICULTURAL & FISHERIES COMMITTEE

Chairperson Mr. Shin, Bum Sick

Member Ms. Hyun, Ki Soon

G. NE ADVISORY COMMITTEE

Chairperson Dr. Ju, Jin Soon

Members
Mr. Chun, Sung Kyu
Mr. Sung, Ki Hang
Mr. Kim, Myong Woo
Dr. Cheigh, Hong Sil
Dr. Harriet Kim
Dr. Chai, Byom Suk

APPENDIX B: LIST OF ADVISORY COMMITTEE MEMBERS

<u>Name</u>	<u>Title and Organization</u>	<u>Date Joined</u>
Dr. Ju, Jin Soon (Chairman)	Professor, Medical College Korea University	11/18/77
Dr. Harriet Kim	Professor, Home Economics College, Seoul National University	11/18/77
Mr. Kim, Ji Hwan	Director, Nutrition Division Maternal & Child Health Office Ministry of Health and Social Affairs	1/13/81
Mr. Chun, Sung Kyu	Director, Rural Nutrition Improvement Training and Research Institute, Ministry of Agriculture & Fisheries	11/18/77
Ms. Kathryn W. Shack	Associate Program Director/ Nutrition Planner, Meals for Millions/Freedom from Hunger Foundation (MFM/FFH)	11/18/77
Mr. John Seo	Asian Regional Director MFM/FFH	11/18/77
Dr. Cheigh, Hong Sik	Head, Food Grain Technology Laboratory, Korean Institute of Science and Technology	8/21/78
Mr. Kim, Myong Woo	Administrative Manager MFM/FFH	1/81
Mr. Michael Park	Program Officer, UNICEF	1/81
Dr. Chai, Byom Suk	Professor, Medical College Seoul National University	1/81

APPENDIX C: PRIZE-WINNING RECIPES FROM THE 1980 COOKING CONTEST

1. Barley Cake

Ingredients: Barley, sweet potatoes, sorghum, kidney beans, red beans, carrots, jujube (fruit) and sugar

- a. Make flour out of barley and sorghum.
- b. Cut sweet potato and carrots into strips.
- c. Soak and cook kidney and red beans.
- d. Mix all ingredients together and steam them.
- e. Serve when it is hot.

2. Barley Cookies

Ingredients: Barley flour, soybean flour, sugar, eggs, milk, butter, salad oil and baking powder

- a. Mix barley and soybean flours and baking powder.
- b. Mix batter and sugar.
- c. Separate eggs and whip.
- d. Make batter of flour mixture, egg yolks and milk. After letting stand one hour, add egg whites.
- e. Make dough into funny shapes and fry.

3. "Song Pyun" (grain cake) - barley

Ingredients: Barley, green onion, carrots, soybeans

- a. Grind barley into fine powder.
- b. Mix barley flour with chopped vegetables for color.
- c. Make dough by adding water; divide into small pieces, and add soaked soybean to each piece. Steam them.

4. "Song Pyun" - Acorn

Ingredients: Acorn powder, peanut butter, soybean flour and sugar

- a. Combine all ingredients with boiling water and make dough.
- b. Divide the dough into small pieces and steam them.

5. Cucumber Pickle

Ingredients: Cucumber, green pepper, garlic, vinegar, sugar and salt

- a. Cut cucumber into desired size.
- b. Salt pieces for a few hours and drain.
- c. Put the cucumber, green pepper, and garlic into a sterilized jar.
- d. Mix sugar, salt, vinegar with water and boil.
- e. Pour the liquid into the jar and sterilize with boiling water 20-25 minutes.

6. Pumpkin Gruel (weaning food)

Ingredients: Pumpkin, barley flour, wheat flour, wild sesame seed, carrots, soybeans, sweet potatoes, sugar and salt

- a. Cut pumpkin, carrots and sweet potatoes in cubes.
- b. Combine flours, and soak soybeans in water.
- c. Boil pumpkin and add soaked soybeans, cut vegetables, and flour; mix and steam well.
- d. Before serving, add sugar and salt.

7. Sorghum Pancake

Ingredients: Sorghum, soybean, red beans.

- a. Soak sorghum then grind well.
- b. Boil soybeans and red beans, mash them, and add sugar.
- c. Pour small amount of ground sorghum onto hot frying pan, put mashed bean on the center, and fold.

8. Fried Carrot Leaves

Ingredients: Carrot leaves, glutinous rice powder, sugar, salt and frying oil

- a. Dry carrot leaves.
- b. Add sugar, salt and water to the glutinous rice powder.
- c. Place the mixture on the dried leaves and deep-fry.