NUTRITION EDUCATION MASS COMMUNICATIONS PROJECT

ANNUAL REPORT

(December 1989)

USAID GRANT

(DAN-0045-G-SS-7117-00)

VITAMIN A DEFICIENCY PROGRAM SUPPORT (931-0045)

(OCTOBER 1988 - SEPTEMBER 1989)

HELEN KELLER INTERNATIONAL, BANGLADESH

PREPARED FOR:

S&T/OFFICE OF NUTRITION
AID/WASHINGTON

PREFACE

Vitamin A deficiency is considered the most important preventable cause of blindness in Bangladesh. However, recent studies in Indonesia, India, Thailand, and Australia showed that vitamin A deficiency is not only important to prevent blindness but also has its impact on child morbidity and mortality. The studies indicated a reduction of 30-60% of mortality in preschool children. Several strategies have been developed to prevent and control vitamin A deficiency. Twice yearly distribution of vitamin A capsules have usually been an early and valuable response in countries or areas where vitamin A deficiency is recognized to be a public health problem.

However, this is recognized to be a measure that is not indefinitely sustainable and relies on foreign support. It is, therefore, generally accepted that preventive capsule distribution is a temporary expedient and that the long-term solution to vitamin A deficiency is to encourage greater consumption of vitamin A-rich foods. This can be done in areas where sources are adequately available and affordable, and through the development of market gardens, as well, where the DGLVs are not available.

However, to date, little work has been done internationally to understand the attitudes, behavior, and practices of mothers towards feeding their children more vitamin A-rich foods in areas where supply is adequate but consumption low. More work is needed to ascertain the most practical and economical methods for changing existing attitudes and behavioral practices.

The particular thrust of this project is to produce a nutrition education mass communication program that would be appropriate, culturally sensitive, cost-effective and able to be evaluated and replicated.

From the findings of National Blindness Prevention Survey, the country was broadly classified into areas of high prevalence of xerophthalmia and areas of low vitamin A capsule coverage. Comilla District was one of the districts found to have both high xerophthalmia prevalence and low coverage and was, therefore, a suitable choice in which to test a nutrition education project.

This project is using the so-called Social Marketing approach, largely developed by Manoff International. This organization has had considerable experience in this area in Indonesia (particularly in vitamin A deficiency and nutrition education), Philippines and India.

I. PROJECT DESIGN SUMMARY

A. STATEMENT OF COUNTRY PROJECT OBJECTIVES

The overall aim is to improve the health and nutrition of children and mothers using a social marketing approach through multi-media communication campaign, with particular emphasis being laid on improving vitamin A intake, and increasing awareness of the need to combat vitamin A deficiency in the target groups.

The specific objectives of the proposed project in the original proposal were:

1. To increase the frequency of consumption of beta-carotene rich foods by weaning-aged children, in particular, and by under 6's, in general, through a promotional campaign advocating specific dietary change behaviors;

2. To encourage local growth and purchase of beta-carotene rich foods;

3. To improve other dietary practices related to reduced vitamin A status, such as late introduction of solids, maternal nutrition during pregnancy and lactation, and breastfeeding practices, through the mass media campaign described above;

4. To increase effective vitamin A capsule (VAC) coverage in the Comilla District among at-risk children (especially those under 3 from landless families and/or with uneducated mothers) through enhanced health worker performance and increased consumer demand;

5. To establish blindness prevention and vitamin A programs as a health priority among influentials in the Comilla District and national policy makers.

These objectives have been refined and quantified, and the aim of influencing the policy makers in support of the project has been accomplished. The ongoing program aims to strengthen support generation at the level of the local health personnel and community. The revised specific objectives are:

1. To increase by over 50% the frequency of consumption of vitamin A and beta carotene rich foods by weaning-aged children and children 5 - 72 months by a communication campaign promoting specific dietary behavioral change;

2. To increase by 25% production of beta carotene rich foods by target families in the project area;

3. To significantly reduce the age at which solid foods are first given, the age at which DGLV and other vitamin A/beta carotene rich foods are first given to the most recent child, and the number of times vitamin A/beta carotene rich foods are eaten per week by pregnant and lactating women in the project area;

4. To increase VAC coverage by 50% among at-risk children under six years old through enhanced health worker performance and increased consumer demand;

5. To inform and persuade district and community leaders about the need for vitamin A deficiency control and capsule distribution so that by the end of the project, 90% of the leaders surveyed will know about and support the program.

In order to achieve these objectives, the program will develop and implement a nutrition education mass communications program focusing on two areas of effort.

1. A year round mass persuasive communications program directed at those families at greatest risk of nutritional blindness to improve production and/or purchase and consumption of vitamin A/beta carotene rich foods;

2. Specific mass communications support for the semi-annual high potency vitamin A capsule distribution campaign.

B. LOCATION AND SIZE OF POPULATION

This project is a pilot project located in Comilla district with a total population of 4,246,269. The target population of children below 6 years is about 1,010,000. The national Blindness Prevention Program targets children 6 months to 6 years for the preventive vitamin A capsule distribution. For objective four, we will target the same group.

For objective one, increasing consumption of vitamin A rich foods by weaning aged children, it is anticipated this may represent at least 186,000 children. There are an estimated 675,000 families in the pilot district, with 600,000 women who are pregnant or lactating at any one time.

II. HUMAN RESOURCES

The original proposal was developed by Helen Keller International: Bangladesh with the assistance of Eve Epstein and Christine Myers of Manoff International. Manoff International expertise has also been available to HKI/Bangladesh throughout the planning and development of the project.

The oversight of the project is with Dr. Martin W. Bloem, the Country Director. The Project Coordinator, Mir Mahboob Ali, bears the overall responsibility of the project. The project is administered from the Dhaka head office but a subsidiary office will be opened in Comilla District prior to launching of the mass media program.

The Institute of Public Health Nutrition (IPHN) is working jointly with HKI on the program's message and media development. HKI awarded local subcontracts through the competitive bidding procedure to carry out the formative research and develop advertising strategies and materials.

Manoff International expert Mr. Richard Pollard provides periodic technical assistance to the project.

III. LINKAGES TO OTHER HEALTH AND DEVELOPMENT ACTIVITIES

Linkages have been established within several sectors: government, international organizations, private non-profit agencies, and local, research firms and a commercial advertising agency.

Government: Our Country counterpart is the Blindness Prevention Program of Bangladesh in the Institute of Public Health Nutrition, itself a part of the Ministry of Health and Family Planning. They are supporting the project both financially as well as by actively participating at every stage of development of the program. The project is, at present, running successfully as a tripartite joint collaboration of the government, UNICEF and HKI, as was envisioned originally. The

Director of IPHN is also a member of the Technical Committee of the project.

International Organization: Along with the Government, UNICEF is working more closely with HKI as a partner. It has played a major role in motivating the government by strongly supporting the program through materializing the financial support by the government. UNICEF has also participated in the field testing of the messages and provided valuable input.

Private Non-profit Organizations: Two local social survey firms with experience in, amongst other things, USAID-funded family planning projects, have completed the in-depth interviews and the focus interviews of the formative research and tested the interventions in the field. This was an excellent opportunity for both firms to benefit from the expertise of the Manoff Consultants in this form of research and represents a real transfer of skills.

Commercial: In the final stage the nutrition messages were created by East Asiatic Advertising Ltd., an established advertising agency in Bangladesh, according to the guidelines given to them, formulated on the basis of our formative research report and a detailed brief produced by Manoff consultant with HKI.

Other links: In this project, we are also receiving close cooperation from other local NGOs (e.g. BRAC, Worldview International).

IV. PROJECT HEALTH INFORMATION SYSTEMS.

A. Baseline survey

As can be seen, the objectives are quantifiable and are expressed in terms of percent change. Therefore, one needs to know what the current situation is. The only reliable figures are now rather dated coming from the National Nutritional Blindness Study done by HKI and IPHN in 1982-83. There is some demographic and nutrition data from the Bangladesh Bureau of Statistics but it is not specific enough for use as baseline figures.

The baseline survey will be done on a representative (as possible) sample selected by stratified random sampling. The design will be done by HKI/Bangladesh

with input from HKI/New York and local Bangladesh expertise, the data collection and analysis by HKI/Bangladesh using the resources of a local social survey firm. Analysis will also be done here with input from New York and Manoff. It is anticipated that this will start in January, 1990, just before the media dissemination of the nutrition messages begins.

To allow for the large effect of season and possible calamities, the follow-up survey to the baseline survey will take place exactly two years later, using a control. The control area will be in the same Division but not directly adjacent because of leakage. Care will be taken to ensure that it is as similar as possible (e.g. not tribal).

B. Monitoring System

Monitoring will be largely programmatic and mainly consist of ensuring that implementation guidelines are adhered to, inputs and the various stages achieved, and awareness, attitudinal and behavioral shifts tracked so that adjustments may be made to the program. A systematic tracking of communications effort will be done three times over the intervention period of 22 months.

C. Midterm Evaluation

This will be done as part of usual USAID requirements.

V. WORK PLAN

Stages of project work

An outline of the major tasks is given below. As can be seen, the tasks fall into 4 main stages; preparatory, formative research, message and material production, and the actual campaign and its evaluation.

A. Preparation

- Hire project staff
- Prepare social marketing plan
- Prepare detailed implementation plan
- Review and refine budget and expenditure plan for annual report.

B. Formative Research Study

- Formulate research questions based on project objectives.
- Review previous research bearing on questions.
- Interview/prequalify research firms.
- Prepare Formative Research Plan.
- Analyze/re-analyze existing data previously collected.
- Prepare research brief/RFP.
- Select/appoint research firms.
- Prepare research protocols and question guides.
- Field test/revise questions/protocol.
- Undertake field work.
- Analyze results with HKI & MI support.
- Transcribe tapes.
- Prepare dictionary of words and phrases.
- Prepare formative research report.
- Define market segments (Targets).
- Identify approach and communications plan for persuading each target audience.
- Review and coordinate with advisory committee.
- Formulate draft intervention strategy.
- Test persuasive communications approaches and fine-tune.
- Produce Mass Communications approaches and messages with specific objectives for specific audiences.

C. Message and Material Production

- Produce creative and media brief.
- Select/appoint advertising agency.
- Develop prototype messages and materials.
- Develop media plan.
- Review and coordinate with Advisory Consultants.
- Pre-test and revise materials and messages.
- Produce final program for Mass Communications Campaign.
- Review and coordinate with Advisory Committee.
- Produce materials and messages.
- Contract for message dissemination.

D. Mass Communications Campaign/Assessment and Evaluation

- Conduct baseline survey.
- Orient local group/agencies.
- Launch Mass Communication campaign.
- Monitor project activities.
- Assess effectiveness.
- Revise/adjust/adapt program.

- Evaluate behavioral change.
- Evaluate project results and recommend improvements.

VI. PROJECT EXPENDITURES AND BUDGET REVISION

HELEN KELLER INTERNATIONAL, INC.
1989 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS
PVO / COUNTRY PROJECT- DAN-0045-G-SS-7115-00

BANGLADESH

COST ELEMENTS	ACTUAL EXPENSES TO DATE (8/30/87 to 9/30/89) AID	HKI	TOTAL	PROJECTED EXPENSES AGAINST REMAINING OBLIGATED FUNDS (10/1/89 to 9/29/90) AID	HKI	TOTAL	TOTAL AGREEMENT BUDGET (8/30/87 to 9/29/90) AID	HKI	TOTAL
PERSONNAL	$20,715	$8,211	$28,926	$114,934	($8,211)	$106,723	$135,649	$0	$135,649
LOCAL CONSULTANTS	$1,218	$1,996	$3,214	$215,782	($1,996)	$213,786	$217,000	$0	$217,000
SUPPLIES	$2,318	$174	$2,492	$10,682	$179,626	$190,308	$13,000	$180,000	$193,000
EQUIPMENT	$757	$500	$1,257	$33,243	$11,500	$44,743	$34,000	$12,000	$46,000
TRAVEL	$5,631	$1,593	$7,224	$18,820	$2,105	$20,925	$24,451	$3,698	$28,149
EVALUTION	$760	$239	$999	$61,740	($239)	$61,501	$62,500	$0	$62,500
DISSEMINATION/INFORMATION	$0	$5	$5	$10,000	($5)	$9,995	$10,000	$0	$10,000
OTHER DIRECT COST	$12,864	$3,132	$15,996	$33,136	($3,132)	$30,004	$46,000	$0	$46,000
TOTAL DIRECT COST	$44,263	$15,850	$60,113	$498,337	$179,848	$678,185	$542,600	$195,698	$738,298
INDIRECT COST	$3,656	$2,821	$6,477	$40,837	($2,821)	$38,016	$44,493	$0	$44,493
TOTAL COST	$47,919	$18,671	$66,590	$539,174	$177,027	$716,201	$587,093	$195,698	$782,791

12/06/89

VII. SUSTAINABILITY

The campaign starts in March, 1990 but sustainability concerns have been considered.

All the formative research has involved a transfer of skills. Local experienced social survey firms have been used with input from Manoff International consultants in the actual requirements of the social marketing approach. These skills will remain in the country.

The media approach should complement the Government's current primary health care approach in which information is relayed on what is basically a one-to-one approach. Using various media is considered as the most cost-effective approach and there is every reason to assume that the Ministry of Health would like to expand the program if this pilot study is successful.

VIII. PROJECT IMPLEMENTATION PLAN

The Social Marketing Implementation Plan is, as follows: (Appendix V)

Activity 1 - Formative Research

The first round of research established a clear understanding of present attitudes, behavior and practices of target audiences relating to feeding practice, in general, and vitamin A rich foods, in particular, as well as providing a perspective into the difficulties and resistances that target audiences face in undertaking consumption of vitamin A rich foods. Existing communications channels were also probed including contact with Health Assistants and Family Welfare assistants.

Activity II - Formulate Intervention Strategies

The formative research allowed us to define the precise interventions/activities we wish the target audiences to perform and to work up the precise words to be used that will overcome all the resistances the mothers may face, using an acceptable and persuasive authority 'voice', to convince the mothers to take the desired action.

The intervention 'words' employed are attached in Appendix I and form the basis for all ongoing creative direction.

Activity III - Test the Strategy

The research field team then visited mothers and using the intervention words encouraged them to undertake the tasks proposed for six days. The mothers were then revisited and the extent to which they had accomplished the task analyzed.

In this case, the results obtained were highly successful and significant increases in consumption of vitamin A rich foods were accomplished by all targets.

Some minor improvements were then made to the precise interventions which have been made in Appendix I.

The summary result of the intervention test is included in Appendix II.

Activity IV - Produce Creative & Media Brief

This document was produced by "Manoff Consultant with HKI support." (Appendix IV)

Activity V - Appoint Advertising Agency

Activity VI - Produce Draft messages, Materials & Media Plan

The message development then took the precise words used successfully in the intervention test (Appendix I) and adapted them to each medium of communications in exciting, culturally relevant, practical, believable and convincing ways designed to ensure real behavioral change through a carefully designed media and communications delivery plan.

Activity VII - Pretest All Materials

All messages and materials were then pretested.

Activity VIII - Amend Materials

The materials were then fine-tuned as a result of the pretesting.

Activity IX - Finalize Program

The whole program is now being finalized and a complete presentation document produced.

Activity X - Produce materials/Final Media Plan

The materials can now be produced in final form and the media plan and budgets approved.

Activity XI - Baseline (& Evaluation)

A quantitative baseline study is now being instituted against which the program can be evaluated after two years.

Activity XII - Orientation

A plan to orient relevant HA and FWA and the health system and support agencies to the project is being developed.

Activity XIII - Launch Effort

The effort will be launched on March 1, 1990

Activity XIV - Monitoring

A plan to monitor implementation of the effort to ensure all components are established; to monitor the impact of the effort every six months and review/revise messages and/or media used if required is being developed.

X. PROJECT ACCOMPLISHMENTS TO DATE

During 1988/89 the project accomplished stages 4-10 of the Social Marketing Implementation Plan outlined in section VIII. The formative research and intervention testing was finally completed after considerable delays, owing to the serious flooding and management constraints, in July 1988. It was only then that the final intervention strategies could be produced and a schedule for ongoing program development be made (see Appendix III).

This was produced by the project coordinator and Manoff Consultant in August, which set an extremely tight schedule to accomplish the remaining tasks.

Between August and December Activity steps IV-IX were accomplished:

- the creative and media brief written
- the advertising agency appointed
- draft materials and media plan produced
- materials were pre-tested with intended audiences
- the materials and media plan were revised and approved
- all materials were put into production

In addition:

- planning commenced for the baseline and monitoring activities
- discussions were held with UNICEF on financial support and instituting the coordination and community participation activities
- close working relationships were continued with the Director and Staff of IPHN

The project is in hand to meet the launch deadline of March 1, 1990.

The final materials are in production prior to launching the communications campaign which is scheduled for 1st March, 1990.

Orientation: The plan to orient relevant HA and FWA, and orient the health system and support agencies to the project is under preparation and will be supported by UNICEF.

Monitoring: The plan to monitor implementation of the effort to ensure all components are established; to monitor the impact of the effort every six months and review/revise messages and/or media used if required, is under active considerations.

Assessment and Evaluation: Active planning. The submission of competitive bids from research firms and preparation of questionnaire is in hand to:

- Conduct baseline survey.
- Assess effectiveness.
- Revise/adjust/adapt program.
- Evaluate behavioral change.
- Evaluate project results and recommend improvements.
- Make a Final Evaluation to measure the success of the program for replication.

COMPLEMENTARY EFFORTS.

A review has been made of available reported data on nutrition and health beliefs, particularly as relating to vitamin A beliefs. Two further studies have been commissioned. One, funded largely from this grant, was by a Canadian anthropologist (based in Southern Methodist Ladies University in Texas) looking at health, nutrition and horticultural of beliefs and practices (especially those of women). Although there are regional differences, food beliefs and practices appear to be relatively homogeneous. She has worked in several areas in Bangladesh with her participant observation site being in the north. Her report reveals interesting information on home gardens, sex-related differing perceptions on food and religion-related differences.

The other work, in Tangail, with special emphasis on vitamin A, was done by a Bangladeshi anthropologist, Dr. Najma Rizvi who has an international reputation as a nutrition/women's role anthropologist. A preliminary report has been received and is interesting in terms of what many village people perceive as the cause of nightblindness (e.g. soot plays a large role) and the recent, but high, acceptance of the presence of 'vitamin' in food. This was largely funded from CS1 money. Both studies gave background data for the development of culturally appropriate nutrition messages.

X. COMMENTS:

On completion of the Intervention Testing, Mr. Ashok Sethi, the Manoff Consultant assisted in finalizing the report.

He was scheduled to come to Bangladesh to discuss this, but could not come. Therefore, the Project Coordinator went to Delhi in August, 1989. He discussed the resistance points and the ways and means to overcome them. The baseline survey for which he had already

prepared a guideline was also discussed. These discussions have greatly helped the Project Coordinator who had just taken over the responsibility of the "Nutrition and Mass Media" project.

Another Manoff Consultant, Mr. Richard Pollard, visited Bangladesh three times, in September, October and December, 1989. Mr. Pollard has helped in selecting the Advertising Agency and briefed the Agency on our expectations of them vis-a-vis the mass media campaign and approval of all materials, the communications plan and budgets.

The Advertising Agency came back with a well considered proposal which was very impressive and was selected for the job.

The Advertising Agency has already developed messages for radio, television, paper and other media as briefed. These messages have been pre-tested and are being finalized for launching in March, 1990.

The Institute of Public Health and Nutrition has been actively involved in the process of development of messages. It has also been associated with pre-testing of messages and has approved of all the materials.

On the basis of the requirements formulated and by competitive tendering, two Bangladeshi social science survey firms were selected to undertake the early development work. PIACT (who has worked in USAID-funded projects in the past, mainly in Family Planning) undertook to conduct and report on the Focus groups to elicit nutrition and health beliefs and practices in the targeted groups and other important influencers such as husbands. FDSR (a University based social research firm) was given the contract to conduct the in-depth surveys. After training and pre-testing both groups worked in the Comilla District and have had periodic, close oversight from HKI/Bangladesh personnel. The interviewers and support staff were required to be in the field an extra month owing to serious flooding of 1988.

XI. CONSTRAINTS.

At this stage any constraints have been minor and we do not anticipate any major ones. The implementation time plan does not allow much flexibility in a country where deadlines are not always easy to maintain. For example,

natural calamities and even political unrest can hamper the progress.

APPENDICES

1. Curriculum Vitae: Dr. Martin Bloem
   Mr. Mir Mahboob Ali

2. Detail Implementation Plan

3. Summary of Findings of Intervention Strategy Testing

4. Revised Activities Plan

5. Media and Creative Strategy for Vitamin A Intervention

6. Social Marketing Workplan by Manoff International

7. Consultant Trip Report by Manoff International

Curriculum Vitae

MARTIN WILLIAM BLOEM

Address	P.O. Box 6066 Gulshan DHAKA-1212 Bangladesh
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Education and Training

Ph.D. University of Limburg, Maastricht, The Netherlands	Oct 1984-Febr 1989
Social medicine, Public Health NIPG-TNO, Leiden, The Netherlands	Jan 1988-
Biostatistics - postgraduate training for physicians Erasmus University, Rotterdam, The Netherlands	Oct-Nov 1987
Sports Medicine Netherlands Institute for Health Care in Sports (NISZG)	1986
Tropical Ophthalmology R.S. Mata Undaan, Surabaya, Indonesia	March 1985
Nutrition Course for Physicians Agricultural University, Wageningen TNO-CIVO Toxicology and Nutrition Institute, Zeist, The Netherlands	1983-1984
Seminar on Techniques and Problems of Intervention Trials in Developing and Developed Countries. Institute fur Soziale Medizin, Freie Universitat, West Berlin Institute fur Sozialmedizin and Epidemiologie des Bundesgesundheitsamtes, West Berlin	July 1984

Epidemiology
Agricultural University, Wageningen,
The Netherlands — Jan-April 1984

Course in Medical Sociology, Anthropology and Health Organization of Developing Countries
University of Leyden, Leyden,
The Netherlands — 1983-1984

M.D.
University of Utrecht, Utrecht,
The Netherlands — 1972-1981

Job_Experience

1989-	Country Director Helen Keller International Bangladesh
1983-1989	Physician/scientist, CIVO-TNO Toxicology and Nutrition Institute, Zeist, The Netherlands. Principal duties were in experimental and epidemiological research on the association between nutrition and health, with an emphasis on the situation in developing countries.
1985-1986	Scientific consultant in the 'Nutrition Supplement Cooperation project', a Dutch-Thai collaborative project in which CIVO-TNO and the Khon Kaen University were involved.
1988	Scientific consultant of the Royal Dutch Airlines KLM for a program aiming at combatting jet lag on "ultralong-haul" flights.
1982-1986	Medical Advisor Dutch Teakwondo Federation
1982-1983	General Practice Army medical officer Royal Palm Barracks, Bussum, Netherlands.

Teaching_Experience

1987-1988	Guest Lecturer Faculty of Medical Biology University of Amsterdam, Amsterdam, The Netherlands
1989	Guest Lecturer Post-Graduate Course for Ophthalmologist Eye Hospital Chittagong Bangladesh

Languages: Dutch, German, French, Indonesian, Thai

Books and Monographs:

Bloem M.W. Vitamin A deficiency, anemia, and infectious diseases in Northeast Thailand. PhD Thesis, Rijksuniversiteit Limburg, the Netherlands, 1989.

Publications:

Shameen A., Archer, S.E., Bloem, M.W. Breastfeeding Practices of Mothers in Dhaka and Narayanganj Bangladesh (in prep)

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Bloem, M.W. Vitamin A deficient xerophthalmia. Chemical Abstracts 1988;108;474,4937g

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Beek, E.J. van der, W. van Dokkum, M.W. Bloem, H. van de Weerd, M. Wedel. Measurements of physical activity as functional indicator of vitamin status in a study of the effects of marginal vitamin intake on physical performance. "Human energy metabolism: Physical activity and energy expenditure measurements in epidemiological research based upon direct and indirect calorimetry". (Aren J.H. van Es, ed) EURO/NUT report 5 (1984).

Bloem, M.W., E.J. van der Beek, M.Wedel. Obesity and Physical performance in regular army personel. Milit. Ned. Tijdschr. Geneesk. 37 (1984) 6.201-9.

Presentations

Bloem, MW, Mild Vitamin A deficiency and Risk of respiratory Infection and Diarrhea in Preschool and School Children in Northeast Thailand. National Symposium and XII IVACG Meeting, 5-10 November 1989, Kathmandu, Nepal.

Bloem, MW, Vitamin A deficiency, anemia, and infectious diseases in Northeast Thailand, Latest advances in the Control of Vitamin A Deficiency and its Impact on Health, Jakarta, November 3-5, 1988.

Reports

Food Consumption and Nutrient intake of the Beneficiaries of the Vulnerable group Feeding Programme (VGF).
World Food Programme and Helen Keller International (1989)

Onderzoek naar de relatie tussen overgewicht en fysiek prestatievermogen met behulp van gegevens van physical fitness tests van het Spot Medisch Centrum van de Koninklijke Landmacht uit de periode 1975-1979, CIVO-TNO Rapport nr.V 84.064/230002.

Vitamin A deficiency and xerophthalmia, CIVO-TNO Report nr.V 86.138/1255.

Progress Report V. Nutritional Supplement Cooperation Project Thailand-The Netherlands. Report No. V 87.423/670561

Carotenoids. CIVO-TNO Report nur. V 88.018

Haematologisch en klinisch chemisch profiel bij varkens met ontstekingen. CIVO-TNO Rap port nr. V 88.103

Is een anti-jetlagprogramme tijdens de lange afstandsvluchten mogelijk. CIVO-TNO Rapport nr. V 88.312

Memberships

"International Directory of Nutritional Scientists and Administrators Involved in Research, Intervention Programs, and other Activities dealing with Vitamin A deficiency and its Prevention", Dr. James A. Olson, Department of Biochemistry and Biophsics, Iowa State University, Ames. Iowa 50011, USA.

"Xerophthalmia Club" Observatory Street, Oxford OX2 6AW, England.

Nutrition in the Tropics, Dutch Society of Tropical Medicine

Tropical Ophthalmology, Dutch Society of Tropical Medicine

Dutch Society of Sportsmedicine

Name	:	Martin William Bloem
Date of birth	:	
Place of birth	:	
Nationality	:	Dutch
Sex	:	male
Marital state	:	
Children	:	

Curriculum Vitae

1. Name :Mir Mahboob Ali
   HKI, Dhaka, Bangladesh.

2. Father's Name :Late Mir Jalal Ahmed

3. Date of birth

4. Postal Address :House No. 40A, Road No.14A,
   Dhanmondi R/A., Dhaka
   Tel: 32 56 28

5. Permanent Address

6. Marital Status :Married

7. Religion :Islam (Sunni)

8. Qualifications:

8.1.

Secondary School Certificate.

1966, securing first division with distinction in Maths and was awarded Board's Merit Scholarship.

Secondary School and Higher Secondary School Board, Karachi, Pakistan.

8.2.

Higher Secondary School Certificate (Pre-Medical), 1968, with Physics, Chemistry and Biology securing 2nd division.

Secondary School and Higher Secondary School Board, Karachi, Pakistan.

8.3.

Bachelor of Arts (with Advanced English Language and Literature).

1972, securing 2nd Class.

University of Karachi, Pakistan.

8.4.

Masters of Arts (English Language and literature) 1974 (held in 1976), securing 2nd Class.

University of Dhaka, Bangladesh.

9. Others

9.1.

Certificate in COBOL (Computer Programming)
Institute of Business Administration
University of Dhaka, Bangladesh.

9.2.

Trained by IBM System Generation, Computer operation, Maintenance, Handling and Data Library Management.

9.3.

Attended Program for Computer Application and development at the Asian Institute of Technology, Bangkok, Thailand.

9.4.

Attended School Volunteer Training for teaching English as a second language conducted by New York School Volunteer Program, New York, USA.

9.5.

Passed four papers of Banking Diploma Exam. Part-I.

10. Experience:

10.1.

Probationary Officer, Uttara Bank, Dhaka Bangladesh.

10.2.

Translator (Journalist), Scientific Journal University of Sulaimaniah, Sulaimaniah, Iraq. and later Scientific Journal, University of Arbil, Arbil, Iraq. Also Attached with The Editorial Board as the Technical Assistant of the Board.

Responsible for overseeing the publication of the journal (Design, Planning, Printing and language editing).

10.3.

Senior Executive, The Bangladesh Observer, Dhaka, Bangladesh. Responsible for Commercial Supplements.

10.4.

Monitoring and Supervising Officer, Helen Keller International.

10.5.

Project Coordinator, NEMC, Helen Keller International.

11. Papers, Guides and manuals

11.1.

The coverage of the Vitamin A capsule Distribution Program in Bangladesh in The Prevention of Xerophthalmia (Unpublished).

11.2.

Vitamin A Capsule Distribution in the Prevention and Control of Vitamin A Deficiency in Bangladesh.

11.3.

Manual for The ordering, Distribution, Monitoring and Assessment of each round (Unpublished).

11.4.

Primary Eye Care Manual For Primary Health Workers (in Bengali).

12. Language

12.1

Read, write and speak: English & Bengali

12.2

Speak: Urdu, Hindi, Arabic & Kurdish

Appendix - I

INTERVENTION MESSAGES : ENGLISH VERSION

Pregnant_Women

Doctors say that a pregnant woman like you should eat green leafy vegetables like helencha shak, kalo kochu shak, lal shak, pui shak and shajna shak every_day.

- Eat at least 1 bowl of green leafy vegetables every day.
- GLVs are rich in vitamins and will prevent the child in you from night-blindness, which is a serious disease and can even turn to total blindness.
- It will also give you strength and help your baby grow healthy and strong and resist other diseases.
- If you really want to eat GLV every day you can find it from the field, around your house or from the market.
- Every time your husband goes to the market,ask him to bring a variety of green leafy vegetables for you.
- You will find that some green leafy vegetable or the other is always available. Remember all green leafy vegetables are good for you. If it is not available in abundance, add it to other vegetables or fish and eat.
- If you are not able to find a green leafy vegetable on some day, eat 1 bowl of 'misti kumra' which is also rich in vitamins and also gives the same protection.

NURSING_WOMEN

Doctors say that nursing mothers like you should eat green leafy vegetables like helencha shak, kalo kochu shak, lal shak, pui shak and shajna shak every_day.

- Eat at least 1 bowl of green leaves every day.
- GLVs are rich in vitamins and will protect the child that you breast-feed from night-blindness, which is a serious disease and can even turn to total blindness.
- It will also give you strength and help your baby to grow resistance to some other diseases.

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- Doctors say green leafy vegetables eaten by nursing mothers do not upset stomach or cause stomach pain ('nari betha') in the children.

- If you really want to eat GLV every day, you can collect/procure it from the field, around your house or from the market.

- Every time your husband goes to the market, ask him to bring a variety of green leafy vegetables for you.

- You will find that some green leafy vegetable or the other is always available. Remember all green leafy vegetables are good for you and through your breast-milk for the child. if it is not available in abundance, add it to other vegetables or fish and eat.

- If you are not able to find a green leafy vegetable on some day, eat 1 bowl of 'misti kumra' which is also rich in vitamins and also gives the same protection. Do not worry, doctors say that 'misti kumra' does not cause stomach upset/pain ('nari betha')

MOTHERS OF 6-12 MONTHS OLD CHILDREN

Doctors say that the 'tota khabar' given to the child from 6 months onwards, should include mashed and softened green leafy vegetables like helencha shak, kalo kochu shak, lal shak, pui shak and shajna shak every day.

- Take a few leaves from the cooked vegetable, mash them well and add it to the child's soft rice.

- GLVs are rich in vitamins and will protect the child from night-blindness, which is a serious disease and can even turn into total blindness.

- It will also give your child resistance from some other diseases.

- Doctors say that green leafy vegetables when mashed well can be easily digested by the child, and do not cause stomach upset or pain ('nari betha').

- If you really want to feed a GLV every day, you can find it from the field, around your house or from the market.

- Every time your husband goes to the market, ask him to bring a selection of green leafy vegetables.

- You find that some green leafy vegetables or the other is always available. Remember all green leafy vegetables are good for your child.

- If you are not able to find a GLV on some day, add some well mashed 'misti kumra' which is also rich in vitamins and also gives the same protection to the child. Do not worry, doctors say that 'misti kumra' does not cause stomach upset/pain ('nari betha').

- It is also true that many children resist the taste of vegetables particularly if they haven't had them before. This is normal. The child needs to get used to any new taste. Try little by little and persevere. Your child will soon get used to the taste.

MOTHERS OF 13-60 MONTHS OLD CHILDREN

Doctors say that you should feed green leafy vegetables like.... to children 13-60 months every day.

- Give at least 1/2 bowl (100 mlg) green leaves every day.

- If the child still eats soft rice, mash the vegetables with it.

- If the child does not eat spices, take out 1/2 bowl of green leafy vegetables, while you are cooking it, before adding the spices.

- GLVs are rich in vitamins and will protect the child from night-blindness, which is a serious disease and can even turn to blindness.

- Doctors say that green leafy vegetables can be easily digested by small children and do not cause stomach upset or pain ('nari betha').

- If you really want to feed a GLV every day, you can find it from the field, around your house or from the market.

- Every time your husband goes to the market, ask him to bring a selection of green leafy vegetables.

- You find that some green leafy vegetables or the other is always available. Remember all green leafy vegetables are good for your child.

- If you are not able to find a GLV on some day, give your child 'misti kumra' which is also rich in vitamins and also gives the same protection to the child. Do not worry, doctors say that 'misti kumra' does not cause stomach upset/pain ('nari betha').

- Some child find the taste of vegetables not to their liking, this is normal. Try different kinds of vegetables, cooked in different ways until you find that that your child likes. Persevere until he really eats vegetables with dark leaves or pumpkin every day.

DETAIL IMPLEMENTATION PLAN

NUTRITION EDUCATION AND MASS COMMUNICATION (NEMC)/ SOCIAL MARKETING PROJECT

A. Preparation

- hire project staff
- prepare social marketing plan
- prepare detailed implementation plan
- Review and refine budget and expenditure plan for annual report.

B. Formative Research Study

- Formulate research questions based on project objectives.
- Review previous research bearing on questions.
- Interview/prequalify research firms.
- Prepare Formative Research Plan.
- Analyze/re-analyze existing previously collected data.
- Prepare research brief/RFP.
- Select/appoint research firms.
- Prepare research protocols and question guides.
- Field test/revise questions/protocol.
- Undertake field work.
- Analyze results with HKI & MI support.
- Transcribe tapes.
- Prepare dictionary of words and phrases.
- Prepare formative research report.
- Define market segments (Targets).
- Identify approach and communication plan for persuading each target audience.
- Review and coordinate with advisory committee.
- Formulate Draft intervention strategy.
- Test persuasive communication approaches and fine-tune.
- Produce Mass Communication approaches and messages with specific objectives for specific audiences.

C. Message and Material Production

- Produce creative and media brief.
- Select/appoint advertising agency.
- Develop prototype messages and materials.
- Develop Media Plan
- Review and coordinate with Advisory Consultants.
- Pre-test and revise materials and messages.
- Produce final program for Mass Communications Campaign.
- Review and coordinate with Advisory Committee.
- Produce materials and messages.
- Contract for message dissemination.

D. Mass Communications Campaign/Assessment and Evaluation

- Conduct baseline survey.
- Orientation for local group/agencies.
- Launch Mass Communication campaign.
- Monitor project activities.
- Assess effectiveness.
- Revise/adjust/adapt program.
- Evaluate behavioral change.
- Evaluate project results and recommend improvements.

INTERVENTION STRATEGY TESTING
-SUMMARY OF FINDINGS-

OBJECTIVES

* Based on the prior research findings of the mothers' behaviour, beliefs and attitudes about vitamin A rich foods, intervention strategies or concepts were formulated, to attempt to bring about the desired behavioural change.

* Essentially, these concepts were the essence of the tentative messages which need to be targeted at the mothers and included :

  - the precise expected behaviour
  - the key resistance points
  - a tenable promise

* in this research study these concepts were tested to assess their:

  - comprehension
  - credibility
  - feasibility
  - acceptability

* The expected result was to have a fine-tuned message skeleton which could be creatively translated into final messages and materials.

OVERALL COMPREHENSION & CREDIBILITY OF THE INTERVENTIONS/CONCEPTS.

* In general, the messages were easily understood and readily believed by the mothers.

* Incomprehension whenever found was restricted to a few words/terms rather than the content.

* Key areas of incredibility or disagreement with the concepts were the same resistance points, which the concepts tried to address:

  - fear of diarrhoea/stomach pain
  - children's dislike

* The only major element of the concepts disagreed with was the possibility of their husbands bringing 3-4 types of green leafy vegetables (glvs) every time they went to the market, because of financial or availability reasons.

PREGNANT MOTHERS

* While 5 out of 14 pregnant women did not have a green leafy vegetable in the 6 day period prior to investigators visit, and 2 did not have it in the following 6 day period.

* Average frequency of consumption went up from 1.1 out of 6 days to 3 out of 6 days - indicating a substantial success of the intervention.

* The two pregnant women who did not take glvs (or pumpkin) on any of the 6 days following the concept exposure, did so because of :

  - dislike of glvs.
  - non-availability.

* The major deterrents to-daily consumption appear to be linked to availability - only 1 pregnant woman also mentioned inability to digest as an additional reason.

* Around 1/2 the meals in which glvs (or pumpkin) were consumed, 1 bowl was consumed. In another 1/4 mg the meals, more than 1 bowl was consumed.

* Those who could not consume the suggested quantity of 1 bowl, were basically prevented by lack of availability.

NURSING MOTHERS

* Half the nursing mothers did not have a glv at all in the 6 day period before the investigator visit. However after the visit, all except 1 out of 14 mothers had a glv in the following 6 days.

* Average frequency of consumption went up from 0.7 out of 6 days to 4.6/6 - with 10 out of 14 mothers having it 5-6 days out of a 6 day period.

* The lone non-consumer was reportedly prevented by lacks of availability.

* No specific reasons, except lack of availability were mentioned as the resistances to daily consumption.

* Almost all nursing mothers consumed 1 bowl or more at a meal. The same as the suggested quantity.

* As for pregnant women lack of availability of the required quantity was stated as the major reason for inability to eat the desired quantity.

MOTHERS OF 6-12 MONTHS OLDS.

* None of the 6-12 months old children were given green leafy vegetables, however after the intervention was explained to them, almost all of them were given a glv at least once in the following 6 days.

* Infact 2 of the 13 mothers gave a glv all the 6 days and another 4 gave it 5 out of 6 days.

* On an average a mother gave glv to the child 2.9 out of 6 days.

* Hence, overall acceptability of the concept seems to be reasonably high.

* The quantity fed was invariably 1 tablespoon or less. It may be worthwhile to add a suggestion on quantity for this segment - around 2 tablespoons.

MOTHERS OF 13-24 MONTHS OLD CHILDREN

* Half of the mothers did not feed any glv to their 13-24 months old child in the 6 day period before the exposure to the concept. However all of them fed it at least once, in the 6 day period following the concept explanation.

* Average frequency of consumption went up from 0.7 out of 6 days to 4.8 out of 6 days, with half of them feeding it <u>all</u> the 6 days.

* Overall success received, therefore, seems very high.

* Fear of diarrhoea, lack of availability or time were the major reasons for not feeding glvs everyday.

* The quantity of glvs (or pumpkin) fed in a meal was invariably very small (less than or 1 tablespoon, against a suggested quantity of 1/2 a bowl). The message about adequate quantitative consumption should be given prominence for this segment.

* Fear of diarrhoea, child's dislike of glvs and inability to obtain glvs in desired quantity were the key reasons for inadequate glv consumption among children in this age group.

MOTHERS OF 25-60 MONTHS OLD CHILDREN

* The non-consumers of glvs declined from 5 out of 14 to 1 out of 14 - following the exposure to the concept.

* Average frequency of feeding increased from 1.2 out of 6 days before the concept exposure, to 3.5 out of 6 days after the concept exposure.

* Overall acceptance of the advice was substantial in this segment also.

* Child's refusal to consume glvs was the reason mentioned for one child, who was not fed glvs at all.

* The quantities consumed here for a meal was about 1/2 a bowl - the same as the suggested quantity.

* Those who did not feed the suggested quantity, were basically faced by the deterrent of child's dislike.

CONCLUSIONS

* The overall acceptance of the concepts has been quite high - both in terms of the mothers' reactions and the extent to which they were able to follow the advice. In general, a fair amount of success was achieved in changing the behaviour (at least temporarily) in the desired direction.

* All the key resistance points were included in the concepts, which were sometimes reiterated by the mothers. The only exception was the child's dislike for green leafy vegetables, which could be creatively addressed in the final messages.

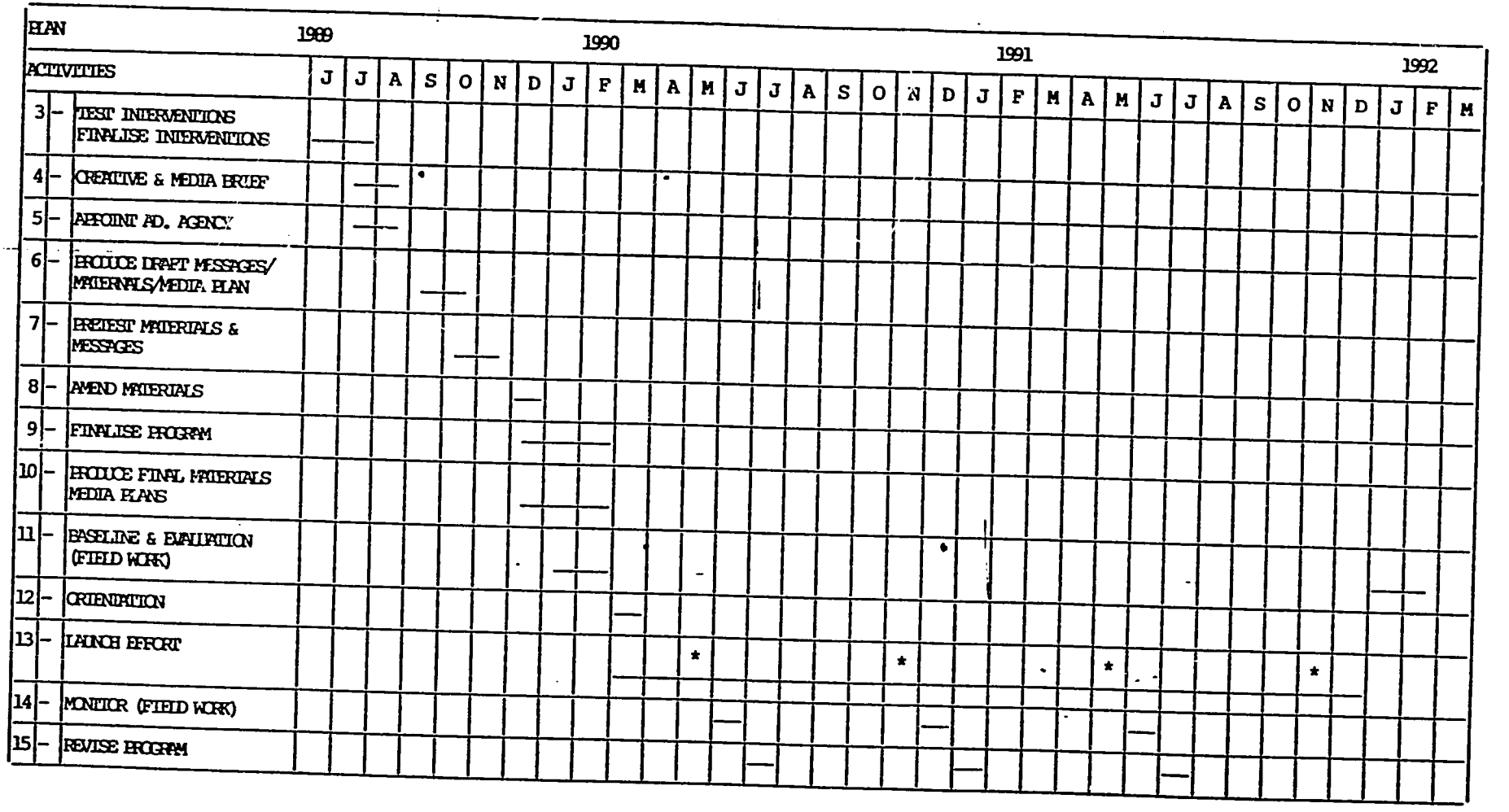
* Quantitative inadequacy remains a problem for children under 2 years, because of a strong fear of indigestibility. Specific emphasis needs to be given to this aspect of the message.

* The promises made in the messages were found credible by all.

* Overall, the concepts provide a good starting point for the development of the final messages.

APPENDIX IV

REVISED ACTIVITIES PLAN



VAC MONTHS

VITAMIN A INTERVENTION

Media and Creative Strategy: Agency Brief

By: Richard Pollard, MI Consultant

The Importance of Vitamin A

Vitamin A is an essential vitamin. Lack of adequate intake leads to progressive deterioration in eyesight; leading to blindness.

The natural sources of vitamin A, aside from mothers milk, are orange roots such as sweet potatoes; orange pulpy fruits such as ripe papaya; orange vegetables, in particular carrots; and dark green leafy vegetables (DGLVs).

Where supplementation is required, vitamin A deficiency can be prevented with only two High Potency Vitamin A Capsule (VAC) doses per year - one every six months. Vitamin A is stored in the liver; however, oil or fat is required to allow absorption. Night blindness and Bitot's spots can be reversed through vitamin A supplementation or a sufficient increase in natural vitamin A-rich food intake.

About 30,000 children go blind every year in Bangladesh through vitamin A deficiency. Studies, in particular in Indonesia by HKI and Johns Hopkins University, have indicated that reductions in child morbidity (illness) and mortality of up to 35% have occurred where vitamin A supplementation has been given, although the precise medical reasoning for this still under investigation. However, as a result of these studies, there has developed a considerable interest in expanding vitamin A interventions worldwide.

In general, the first priority in areas where vitamin A deficiencies exist has been to introduce VAC distribution on a targeted or bi-annual basis. However, it is also realized that, on national levels, capsules must be gradually replaced by intake from natural food sources, because the cost of sustaining preventive capsule distribution is prohibitive, particularly if valuable foreign exchange must be used to purchase the capsules.

It is therefore generally accepted that preventive capsule distribution is a temporary expedient and that the

they are not. Some research is also underway to improve the vitamin A content of food stocks. In Wisconsin, for example, a super carrot containing ten times the usual vitamin A content has been developed and is now under field trials.

However, to date little work has been done, internationally, to understand the attitudes, behavior, and practices of mothers towards feeding their children more vitamin A-rich foods in areas where supply is adequate but consumption low, or to ascertain the most practical and economical methods for changing existing attitudes and behaviourial practices.

USAID in particular has allocated funding to support social marketing programs for such trial projects. The first to be implemented are test studies in West Sumatra in (Indonesia) in Thailand and the Philippines as well as Bangladesh. These projects are expected to provide valuable inputs into the most efficient methodologies to be employed to accomplish these aims, on an international basis.

Background to Bangladesh

Recent studies show that, in Bangladesh. 70 million persons are deficient in vitamin A intake; almost one million children suffer from some form of eye disease due to this deficiency, and 30,000 children are blinded each year.

Children deficient in vitamin A have been found to have twice as much respiratory disease and almost three times as much diarrhoeal disease as normal children regardless of their general nutritional status. Since these diseases account for two-thirds of child deaths, focus on vitamin A deficiency control could be expected to have a major impact on child illness and mortality in addition to preventing night blindness and blindness.

Vitamin A deficiency is thought to be worse now than 23 years ago. Per capita daily consumption has declined from 93 percent of requirement in 1964 to 38 percent in 1987.

In response to this tragic situation, and following a WHO recommendation, the Government commenced, a vitamin A capsule distribution campaign to all children 6-60 months old, in 1973. The capsules are distributed on a targeted house-to-house basis twice a year by Health Assistants in all rural areas. To date it is estimated that present coverage is 35.2%

Current efforts are underway to improve the training, motivation and supervision of this supply effort primarily through UNICEF with HKI support (Capsules are now to be distributed via Health Assistants and Family Welfare Assistants). Little effort has been extended to date in the area of creation of demand from mothers for the capsules, or towards the longer-term objective of improving consumption of vitamin A rich foods.

Efforts to determine how best, and most economically, this can be done are the primary objectives of this pilot project.

The Test Market Area

Comilla District has been chosen as the test market area. This is one of the seven districts in the Country with the highest prevalance of xerophthalmia.

Basic Data

Population	:	3.5 million
Pregnant mothers	:	400,000 app.
Lactating mothers	:	400,000 app.
Children 0-60 months	:	816,000 app.

Number of Upazilas	=	12
Number of Unions	=	170
Number of villages	=	2963
Number of Health Assistants	=	771
Number of family Welfare Assistants	=	472
Number of NGOs working	=	17

BEHAVIOURIAL OBJECTIVES

1. Capsule Distribution
   a) Providers.

      The providers from the national level to the HAs and FWAs will be more motivated to correctly distribute VA capsules to all children 6-60 months old, twice a year

   b) Husband & mothers with 6-60 months old children

   - will ask for VAC from HAs/FWAs and ensure their children receive them

2. VA Nutrition Campaign
   a) Husbands & Mothers

   - mothers will ask husbands to supply (from the market or village) an adequate supply of vegetables to feed all their 6-60 month old children vitamin A rich foods - in particular dark green leafy vegetables (dglv) and pumpkin -every day.

   - mothers will obtain dglv and pumpkin from their own gardens or from neighbours

   - mothers will add dglv and/or pumpkin to their child's regular diet every day

   b) Family members

   - family members such as mother- and sisters-in-law and elder children will actively support the mothers

   c) Community

   - the community at large including health workers,doctors, medicine suppliers, traditional doctors/midwives, religious leaders, school teachers and all others formal and informal respected/authority figures will know about the program, understand the reason and benefit of it, and support it either actively or, at least, passively as appropriate

   d) Institutional Support

   - the project will be approved and supported by all relevant Ministries, Aid Agencies and NGO's on both national and District levels.

Target Audiences

The formative research outlined the target audience breakdown.

Primary Targets

Pregnant Mothers
Lactating Mothers
mothers of 6-12 month old children
mothers of 13-60 month old children
Relevant husbands

Secondary Targets

Mothers-in-law
Sisters-in-law
Other older family members
HAs and FWAs

Tertiany Targets

Formal & informal authority figures Health and traditional health suppliers

Budget

The budget established for the program is US$ 90,000 for media and media materials. Out of this a reserve of US$ 15,000 should be set aside for modifications to the program after monitoring.

This budget includes the cost of producing a draft proposal, the production of media materials in a suitable farm for pretesting, the pretesting of the materials in the field, revising the materials after pretesting and their production and all media dessimination costs including (if proposed) erection of outdoor/P.O.S materials, promotional and P.R. effort.

However the agency is free to propose additional budgets should they feel this is required to ensure necessary impact.

Time - Scale

Draft agency presentation	- October 8
Approval by	- October 12
Presentation materials for pretest	- October 31
presentation pre-test results	- December 10
Final approval program	- December 15
Launch date	- February 1

The client

Your client is Helen Keller Int., Bangladesh
Country Director : Dr. Martin Bloem
Project Coordinator : Mr. Mir Mahboob Ali

SOCIAL MARKETING FORMAT

The project is utilizing a Social Marketing format supported by The Manoff Group, Washington D.C.

Social marketing is a disciplined methodology designed to go far beyond the simple educational process but lead to real and permanent behaviourial change.

Education accomplishes its task once the knowledge to be transmitted has been successfully received by the recipient. There is, more often than not, little concern for what use or what purpose is made of the knowledge obtained.

Social Marketing takes as its basis the experience of commercial marketing where the objective goes beyond education alone, but is essentially designed to ensure purchase or action.

Moreover our Social Marketing task is also more difficult than commercial marketing in that the latter is essentially satisfied with switching consumers from one brand to another whereas our competition, in the nutrition field is to do nothing or to wait until illness strikes and endeavour to cure it.

We are required to pay, for more attention to consumers attitudes and resistances to action, therefore, and to the whole creative process. The agency needs to be very aware of this.

The Social Marketing format is, as follows :-

Activity 1:- formative Research

The first round of research established a clear understanding of present attitudes, behaviour and practices of target audiences relating to feeding practice, in general, and vitamin A rich foods, in particular, as well as providing a perspective into the difficulties and resistances that target audiences face in undertaking consumption of vitamin A rich foods. Existing communications channels were also probed including the contact with Health Assistants and Family Welfare Assistants.

Activity II - Formulate Intervention Strategies

The formative research allowed us to define the precise interventions/activities we wish the target audiences to perform and to work up the precise words to be used that will overcome all the resistances the mothers may face, using an exceptable and persuasive authority `voice', to convince the mother to take the desired action.

The intervention `words' employed are attached in Appendix I and form the basis for all ongoing creative direction.

Activity III - Test the Strategy

The research field team then visited mothers and using the intervention words encouraged them to undertake the tasks proposed for six days. The mothers were then revisited and the extent to which they had accomplished the task analysed.

In this case the results obtained were highly successful and significant increases in consumption of vitamin A rich foods were accomplished by all targets.

Some minor improvements were then made to the precise interventions which have been made in Appendix I.

The summary result of the intervention test is included in Appendix II.

Activity IV - Produce Creative & Media Brief

As per this document

Activity V - Appoint Advertising Agency

Activity VI - Produce Draft Messages, Materials & Media Plan

Now requested. The message development now takes the precise words used successfully in the intervention test (Appendix I) and adapts them to each medium of communication in exciting, culturally relevant, practical, believable and entirely convercing ways that will ensure real behaviourial change through a carefully crafted media and communications delivery plan.

Activity VII - Pretest All Materials

All messages and materials will then be pretested.

Activity VIII - Amend Materials

The materials are then fine-trained as a result of the pretesting

Activity IX - Finalise Program

The whole program is now finalised and a complete presentation document produced.

Activity X - Produce materials/Final Media Plan

The materials can now be produced in final form and the media plan and budgets approved.

Activity XI - Baseline (& Evaluation)

A quantitative baseline study is now undertaken against which the program can be evaluated after two years.

Activity XII - Orientation

To train relevant HA and FWA, and orient the health system and support agencies to the project.

Activity XIII - Launch Effort

To launch the effort

Activity XIV - Monitoring

To monitor implementation of the effort to ensure all components are established; to monitor the impact of the effort every six months and review/revise messages and/or media used if required.

Advertising Agency Responsibilities

The Agency shall have the following responsibilities:

1. To become completely conversant with the social marketing methodologies being employed.

2. To allocate to the project one permanent social marketing-oriented account executive to be responsible for all client contact and to ensure that all deadlines are met.

3. To become fully conversant with the formative and intervention test research; to obtain from HKI original language transcripts for use in producing creative materials that employ appropriate language and phraseology in the local dialect.

4. To assist in finalizing the creative, media, and strategy document.

5. To produce print and audio material for pretesting.

6. To review pretesting research results and adapt materials and messages accordingly.

7. To arrange placement and monitoring of all media materials.

8. To endeavour to obtain commercial sponsorship for suitable print materials and promotional efforts, where possible.

9. To arrange production and erection of all billboards, banners, and posters, as required.

10. To assist in arranging promotions in markets and villages, as requested and required.

11. To produce and monitor budgets.

12. To prepare a presentation on the project, including slides, and to make at least three project presentations.

13. The agency is to record all meetings with the client in the form of a client contact report, to be delivered to the client within 48 hours of each meeting.

Media Strategy

Media means all communications channels that can be utilized/developed to communicate with target audiences, bearing in mind cost, sustainability and management constraints.

The program's aim is to define, through this test market area, what level of behaviourial change has occurred as the result of the weight of communications effort that reached target audiences over the time-span of the project. Out of this we can calculate the cost of the effort to achieve the result.

The objectives of the media plan are to ensure that a majority of the total population knows of theintervention; that those support groups closest to mothers both know and understand as well as support the intervention actions of the mothers, and that the mothers understand and take the actions proposed.

It is important to bear in mind that the weight of communication achieved must be replaceable in the wider context of launching the project on a national basis, at the

same (or preferably at a lesser) cost. This must be taken into account in the choice of media channels to be used. However, note, that we refer here to the weight of communication achievable and not rigidly to specific media use. In other words it may be practical to select a different media mix in the test market area than one would use for a national campaign. This is permissable providing one is not injecting a weight of effort which is not replicable on a wider scale.

Channels of communication

The following are notes concerning potential communications channels that came out of the formative research in the intervention area. This research was qualitative in nature and, therefore, is not an accurate statistical yardstick but only a general guide.

- The target mothers came into contact with very few external communications sources at all, beyond the limitations of their family and neighbours; their travel patterns were negligible, even shopping being performed by husbands.

- less than 1/2 of them listened to media with any degree of frequency and then often passively. Stations noted were Dhaka, Comilla, Chittagong, Khulna and Agartola. The most popular programs were songs, drama and family planning. The most listened to times were varied but centred around noon and 8-10 pm.

- between 1/4 and 1/3 watched television occasionally (usually at a neighbour's house)The most popular programs were drama and film and, to a lesser degree, family planning. The most popular time for viewing was 6-8 pm.

- hardly any of the mothers even went to the cinema, moving cinema or jatra/jari gaan.

- a few mothers read newspapers. Those mentioned were Ittefaq, Dainik Bangla and Bichitra.

- about half the mothers had even met a Health Assistant (HA) or Family Welfare Assistant (FWA) and neither seemed to have offered any tangible or meaningful advice.

- in general there was no village-based cooperative or welfare or community institutions reported, as support groups for mothers.

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In comparison, husbands were much more mobile and open to communications contact points.

- 3/4 listened to radio
- 1/2 watched television
- about 12% went to cinema
- about 8% attended village clubs
- over half had met the HA and FWA and most respected their advice
- most went to markets

The agency is to review the above in light of other data they may posses and came up with a proposed media plan (including outdoor and point-of-sale) with reasonable estimates of weight and frequency of contact medium.

NOTES

1. The VAC campaign to run two months in the year; the VAC nutrition campaign the other 10 months. The two campaigns to be costed separately.

2. The client will develop the HA and FWA as VAC distributors and as nutrition communicators. The agency will, however, be asked to produce some point material for these purposes from designs and copy provided by client. Tk. 50,000 should be reserved for this.

3. The agency is to consider the development of other specific communications channels beyond these noted above, such as talk media, the rent or size of audio or audio-visual media, the use of any other existing audio or audio-visual networks etc: bearing in mind the cost, management and replicability constraints.

4. In view of the probability that no media plan will offer an adequate depth and weight of direct contact with mothers careful thought needs to be given to the development of indirect contact such as through husbands. In this case promotional activities at village clubs and at the markets themselves (the point-of-sale) would be useful providing the message content positively reenforces the objective ie that the husbands Do talk the mothers.

5. The media plan must also cover the secondary and tertiary targets to ensure support, as well as a small P.R. budget for releases to national media over the course of the project but in particular at the launch phase.

6. It is possible that the Health Assistants and Family Welfare Assistants may be able to put up promotional banners or flyers to support the VAC promotions. There are 1,243 of them in Comilla District.

Creative Strategy

The creative task is to transform the words successfully used in the intervention test to convince mothers to feed more vitamin A rich foods, into compelling media messages.

To support this creative process the following is a review of relevant research findings.

1. Some notes on research findings
Health Status

A little under half the pregnant mothers and about two-thirds of lactating mothers felt, generally, unwell of were ill and those with 0-60 month old children felt that about half of them were ill, or at least, not well.

In general there was a relatively passive attitude to what steps could be taken to improve health status beyond general beliefs to eat better or take medicine, neither of which was usually accomplished.

There is a clear need for education to reenforce action to improve nutrition and an indication of a high degree of acceptance by mothers.

Vitamins & Vitamin A

The word 'vitamin' was known but not vitamin A, in general and mothers understood that vitamins were health promoting.

Vitamin A rich foods

All vitamin A rich foods were acknowledged as health promoting but all were very low on the list of priority foods.

None of the children 6-12 months old received any vitamin A rich foods (beyond breastmilk) and only 20% of the children 12-60 months old were given any. However all the children in this older age group were given animal foods such as milk, fish, beef and eggs.

The status of vegetables needs raising to become an essential part of the daily diet

Night_blindness

In general mothers knew of night blindness and regarded it as serious, but few understood that it could be caused through intake of vitamin A rich foods.

Authority_Figures

As regards health problems mothers said they simply discussed them with husbands or elder family members. There was no village based authority on such subjects. However messages received from doctors were clearly believed and credible.

2. Brand_Positioning

to take the commercial term of brand positioning, clearly, the image of vitamin A rich foods requires considerable `repositioning' in the minds of mothers. The `value' of dgly and orange fruits/vegetables needs to be raised from that of a secondary food-staff to one of primary importance (along with breastmilk and other foods the mothers and children eat).

The rationale behind this brand positioning must include the `value' of these foods in ceasing/preventing night blindness, but_to__concentrate_on__this_alone_may__reenforce the_limited__value_of_them, therefore vitamin A rich foods need to be also promoted as valuable in improving overall health status.

3. Resistance_that_must_be_overcome

Aside from the generally low `image' of vitamin A rich foods in the minds of mothers some specific resistances persist.

i) Some_cause_diarrhoea/stomach_pain

This resistance was overcome in the intervention testing by selecting those least known to cause these problems (see Appendix I) and by explaining that if dgly is well cooked and well mashed this problem is avoided.

ii)_ Children_do_not_like_dgly

Here we express to the mothers that this is normal particularly with very young children receiving a new taste sensation for the first time. It is necessary to try a little at a time and persevere so that eventually the child will get to like it. With older children the

key is to suggest the mother try different kinds, and cook them in different ways in order to find out which the child likes best.

iii) They are not easily available

This resistance appears to be a combination of factors -seasonality, affordability and lack of motivation from husbands to provide. However in the intervention testing it appeared that once it was made clear that vegetables are obtainable not only from markets but from within the village itself, plus the possibility of substituting pumpkin and the mothers were strongly motivated to obtain them, almost all mothers did succeed in doing so.

Creative Directions

These are considerable constraints in converting successful one-on-one, face-to-face communications into the limitations of the mass media.

i) Radio

It is clearly impossible to pack the total message into one 60- second radio spot !

Experience, to date, has shown us that in radio it is necessary to break-down the total message package into a series of spots.

As guide only for the creative team, the series could be as follows:-

General themes

- One, or more, general spots which through the creative use of songs or traditional poetry tackle the 'image' issue of vegetables
- one spot addressed to mothers of 6-60 months children stressing the need for VA rich foods every day and overcoming the resistance to diarrhoea
- one spot addressing the issue of need and availability centered around the mothers' request to the husband to supply

Targetted Spots

to pregnant mothers on the issue of her health and that of her unborn child, to eat every day

- to lactating mothers stressing her health and the benefit to her child through her breastmilk; a second spot concentrating on the resistance that her thus fortified breastmilk causes her child stomach ache.

- to mothers with 6-12 months old children on the feeding practice, quantity "some mashed vegetables every day".

- to mothers with 13-60 month old children on the feeding practice and quantity "1/2 bowl every day".

This, if followed, would give a total of nine spots. The media plan would, therefore, require a relatively large number of spots to be broadcast and a high frequency to gain the required coverage. Consideration needs to be given as to whether to mix up the spots or broadcast each of them over longer periods by rotation.

Notes_on_Radio_Spots

Experience has shown us that pure announcement spots are rarely effective. The `ambience' of the spots needs to be interesting, attractive, culturally relevant and with an atmosphere of caring.

An example of a radio spot used in Indonesia may be useful. This spot was aimed at addressing the diarrhoea resistance and as this resistance is stronger with the youngest children a mother with a six month old child was chosen.

Mother	:	Mother-in-law,. what are you putting in my baby's rice porridge ?
M-in-law	:	Oh! Some cooked, chopped vegetables and a drop of oil.
Mother	:	Where did you get this strange idea ?
M-in-law	:	I heard it from a doctor on the radio. Listen !
Doctor	:	After six months all children need dark green vegetables every day to keep them healthy and strong.
Mother	:	But, mama, a child of that age cannot digest vegetables
M-in-law	:	She-h, listen!

Doctor : A six month old child can easily digest vegetables and avoid diarrhoea if the vegetables are well boiled and well washed first.

Mother : Well, so to keep my baby healthy and strong I must give my child after 6 month boiled and mashed vegetables every day with a little oil.

M-in-law : Yes, we are finding new and good ways now to keep our children healthy.

Mother : Come, my baby, it's time for your daily vegetables now.

Note here that we use a doctor to reenforce the message and carefully repeat the action we require the mother to take as often as possible.

The spot also develops the cultural relationship between mothers and mother-in-law, as well as clearly and honestly addressing the mother's concern about diarrhoea and convincingly assuring these concerns.

ii) Television

It is possible that owing to cost factors TV film spots would be prohibitive. Telopes might be useful perhaps only on the General Themes outlined above.

iii) Posters

Experience to date is that posters lack any real ability to generate enough message content to lead to behaviourial change on their own. They are only useful to give a simple visual reminder of messages given over radio/television or from health workers.

The VA Capsule Campaign

We have not provided, here, any detailed research findings to aid the creative process for the twice yearly VA capsule campaign.

This is primarily because our experience to date shows us that it is not necessary to consider any major resistance points for this product. Creatively the VA capsule can be treated as given free, now, by HA's and FWA's and is beneficial to your child's health and protect your child from serious illness. The creative key is to address the

advertising to the target audience - mothers with 6-60 month children - and get them to go (or ask the husband to go) to the nearest HA or FWA and demand it. This therefore can take an `announcement' form.

Social Marketing Workplan

Bangladesh Vitamin A Project

for

Helen Keller International

by

Manoff International Inc
Richard Pollard
Marketing Consultant

March 1988

1. The Workplan

ACTIVITY 1 - Formative Research

Sub-activities

- Appoint research firm
- Prepare protocols and question guides
- Test question guides
- Undertake fieldwork
- Transcribe tapes
- Produce dictionary of words & phrases
- Tabulate and precis findings
- Translate findings
- Write report

Resources - HKI Project Coordinator and appointed research firm supported by MI research consultant

Objectives - A qualitative probe into the present attitudes and practices of primary targets and a select list of secondary targets to VAC distribution and consumption of vitamin A rich foods; to probe awareness and understanding of vitamins in general and vitamin A in particular and knowledge of sources and benefits; to probe preference likes and dislikes of vitamin A rich foods, oils and fats as well as availability (seasonally) and affordability factors; to probe present child feeding practices, blocks and resistances that may exist towards feeding 5-60 month children vitamin A rich foods and discuss recipe and preparation ideas that may best

help overcome these resistances; to probe authority figures that may most effectively presuade the mother to action; to probe family relationships and decision factors in mother and child food choices and feeding practices; to probe the mothers' travel patterns and communications points, media contact by type, preference, time and frequency; awareness of and attitudes to the Health Worker, to VAC distribution and health system and her attitude to the traditional health system.

Report and Tabulation -

The qualitative nature of the research requires a careful and objective summary of all the opinions given for each area probed. This requires considerable skill and great care is needed in the choice of research staff to undertake it. It is proposed that MI research consultant interview and approve, and work closely with the research staff undertaking this work.

The dictionary of words and phrases is to be used as a guide to language ambience and cultural relevancy in the production of messages.

ACTIVITY 2 - Formulate Intervention Strategies

Resources - HKI Project Coordinator supported by MI marketing consultant.

Objectives - To produce a written document that defines the precise intervention/s to be accomplished by each target; in what manner, and using what authority, is it intended that

she be persuaded to undertake the task; what resistances may be expected from her and in what way these resistances are to be overcome.

Referrals/Coordination

At this stage the summary of the Formative Research and the Intervention strategy document are to be reviewed, for approval, by HKI Incountry Director and relevant staff of Government, USAID, UNICEF and any relevant PVO to ensure liaison and to ensure the proposed interventions are compatible with policy.

ACTIVITY 3 - Test Intervention Strategies

Resources - HKI Project Coordinator and the selected research company supported by MI research consultant

Objectives - to endeavour to persuade each target to undertake a trial of each intervention for one week, overcoming any resistances in the manner, proscribed. However should resistances still remain, or new ones surface, to adapt and amend the approach or even work with the mother to amend the way she is to accomplish the desired action, until she agrees to the trial and noting, carefully, how she was convinced to undertake the task and what, precisely, she has agreed to do.

After one week each mother is revisited and an analysis made of those who succeeded, those who partially succeeded and those who failed. Further probing is also to be undertaken to

analyse the less successful cases and efforts made to understand, precisely, the cause of failure and, through interview, to glean likely ways the mother might succeed through adapting the approach or overcoming resistances differently.

A final list of interventions is then produced detailing, precisely, the most effective manner of approach; the resistances that block success and how these resistances were overcome, for each of the target audiences.

ACTIVITY 4 - Produce Creative & Media Brief

Resources - HKI Project Coordinator supported by MI marketing consultant

Objective - a written brief for the advertising agency which outlines the project background and objectives and details the results of the Formative and Intervention Tests and suggests budgets for production of material, media dissemination, promotional and public relations activities. The brief also outlines creative and media directions that the research has indicated for each target group and each message, the precise intervention proposed, the authority figure to deliver it, the resistances expected and how they are overcome, the tonality, ambience and cultural relevancy of each message. It is then presented to the agency and discussed, with them, in detail.

ACTIVITY 5 - Appoint Advertising Agency

Resources - Project Coordinator with HKI senior management approval supported by MI marketing consultant.

ACTIVITY 6 - Production of Draft Messages and Materials, and Media Plan

Resources - Appointed Advertising Agency

Objectives - to produce a complete project presentation summarising the project's objectives and presenting draft messages and materials - layouts for print, scripts for radio and story boards for audio-visual - and complete and detailed rationale for each; promotional and public relations proposals and detailed media plans with budgets, including reach and frequency and cost effectiveness analysis.

Approvals - the Project Coordinator with MI support to present the project with the agency to HKI senior management to review and revise it, as appropriate. Radio spots are then recorded and approved. Copies of all material are then produced for research.

ACTIVITY 7 - Pretest Materials and Messages

Resources - HKI Project Coordinator, research company supported by MI research consultant

Objectives - to test messages and materials with target audiences and select secondary targets to ensure they are

clear, unambiguous, comprehended, credible, culturally relevant, emotionally appealing and free of negatives. To present the project to Government, USAID, UNICEF and relevant PVOs for their approval and input to ensure coordination, and the project messages are in line with policy and do not conflict with any similar project or messages being disseminated in the intervention area.

ACTIVITY 8 - Amend Materials

Resources - HKI Project Coordinator, the advertising agency supported by MI marketing consultant.

Objectives - to amend/adapt materials in accordance with pre-test results, as appropriate.

ACTIVITY 9 - Finalise Program

Resources - HKI Project Coordinator supported by MI marketing consultant

Objectives - to produce a final summary document on the project for presentation to all interested parties and for coordination presentation. If budget allows the advertising agency should be asked to help prepare this presentation in slide and written document form. As part of this both the research firm and advertising agency should be asked to document their work, in particular field work, on film in colour slide and print formats.

ACTIVITY 10 - Produce Materials/final Media Plans

Resources - advertising agency briefed by HKI Project Coordinator

Objectives - to produce all media, print and promotional materials and finalise media and promotional plans.

ACTIVITY 11 - Baseline and Evaluation

Resources - HKI Project Coordinator and research company supported by MI research consultant

Objectives - to produce a quantitative yardstick of present attitudes and practices in the intervention area, and a control area if practical against which the project may be evaluated; to evaluate the project, at the same time of year, two years after launch.

ACTIVITY 12 - Orientation

Objective - to orient the VAC distribution system to the program; to commence training/orientation of field workers (Health Workers or other field workers appointed); to ensure monitoring and supervision of field workers is in place. To orientate all interested parties - USAID, UNICEF and PVO's as to the final project.

ACTIVITY 13 - Launch effort

Resources - HKI Project Coordinator and advertising agency and all other support mechanisms supported by MI marketing consultant.

Objectives - launch effort and oversee effort is properly instituted.

ACTIVITY 14 - Monitor Project & Adapt as Appropriate

Resources - HKI Project Coordinator supported by advertising agency, research company and by MI research and marketing consultants.

Objective - to monitor the implementation and effectiveness of the program every six months (suggested at three times over the two years of the project and undertaken one month after VAC distribution months). To amend and adapt the program accordingly.

MANOFF GROUP INC.

Social Marketing of Vitamin A

Helen Keller International
Bangladesh

Consultant Trip Report No. 2
Preparing the Communications Strategy

August 28 to September 2, 1989

by:

Richard Pollard
Marketing Specialist
The Manoff Group, Inc.

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APPENDICES

Summary of Consultancy

The objectives of this consultancy, which took place from August 28 through September 2, were to:

- o meet with advertising agencies and request proposals
- o write the creative media brief
- o leave clear criteria for selection of an agency to design and pretest materials

I fulfilled these objectives as follows:

- o The project coordinator and myself reviewed the survey of agency resources commenced after my last visit. We agreed that East Asiatic was an appropriate choice of agency, pending a further satisfactory visit to them, and our review of a draft proposal which we would now ask them to make. The three of us visited this agency, and we agreed to ask them to make us a detailed proposal.

- o I then produced the creative and media brief which is now to be typed and presented to East Asiatic by the project coordinator over the week commencing September 4th (attached).

I also reviewed the status of the project with the project coordinator and Mrs. Mira Mitra, and subsequently with the Country Director. Below is a summary of our discussions, recommendations and agreements reached:

- o The formative intervention test research has been satisfactorily completed. However, the summary documentation is still not produced combining the in-depth and focus group reports. This is now to be completed by the project coordinator and disseminated to the Technical Committee and any other interested parties.

- o The intervention document in the form of the precise words used to convince the mothers to undertake the proposed interventions was well documented, but as yet not updated as a result of the intervention testing report made by the Manoff Group research consultant. I therefore revised the interventions accordingly in the English version. The project coordinator will now get the local dialect document revised, particularly the copy for the advertising agency.

- o A number of factors have led to delays over this research phase, notably floods which delayed fieldwork, and the change in project coordinators. It is now expected that the media launch should occur in February 1990 which is, fortunately, an ideal season for DGLV's (dark green leafy vegetables) supply. The present schedule is:

Receive draft creative/media	- October 8
Approval	- October 12
Pretest materials produced	- October 31
Pretest report	- December 10
Final approval of program	- December 15
All materials ready for launch	- January 31

This schedule is very tight and its accomplishment depends upon the effectiveness of the advertising agency, as yet untested.

- The baseline study is now scheduled for fieldwork in January. A brief for the research firm has been presented by the Manoff Group research consultant. It was agreed that HKI should now proceed to obtain proposals from suitable firms and that this work could proceed without further Manoff Group support, unless otherwise requested.

- We discussed the extreme lack of communications links to mothers and the general unreliability of existing village-based health workers as communicators. It was agreed that prior to receiving the advertising agency's proposals on October 8, the project coordinator would review the experience in developing communications links by other projects, and the potential for developing NGO involvement in providing health communicators in our project area.

- We visited UNICEF and were advised that both the Health Assistants and Family Welfare Assistants will now distribute VAC and counsel mothers. Also, the training program for this had already been completed in our area for 1,183 Assistants, including the use of new VA counseling flash cards. It was tentatively agreed that UNICEF would support a new training/retraining program for our project, and that HKI would firm up a plan for this activity.

- We visited USAID and agreed to keep them advised on the project.

- I brought up the subject of project management, stressing the need for constant contact and supervision of all activities in the field, in particular over the first six months of implementation. The possibility of opening a field office was discussed.

- We reviewed budgets and agreed that $90,000.00 should be adequate for the communications component, excluding HA/FWA training, and including a reserve for revisions to the project after monitoring. We shall only know for sure that this budget is adequate once the advertising agency has provided its inputs, the final communications package is agreed, and the depth and weight of message delivery known. The research budget seems inadequate to cover the baseline and evaluation studies as well as at least two monitoring studies and materials testing. In view of this, I asked the advertising agency to see if they could undertake the materials testing research within their $90,000.00 budget.

Next Consultancy

My next consultancy trip was set at October 6 for one week to help finalize the communications program.

Future Consultancies

Pending funding availability future trips, of 7 days each were proposed as follows:

- From December 6, 1989 - to approve final program
- From January 24, 1990 - to assist over launch period, prepare first monitoring
- From August 1, 1990 - to review program after first monitoring
- From February 1, 1991 - to review program after second monitoring
- From February 25, 1992 - to assist in evaluation report.

The Manoff Group research consultancy support is also suggested to assist in developing monitoring protocols, in July 1990 and in final analysis report of the baseline and evaluation studies in February 1992, totaling 3 weeks of consultancy.

Persons Contacted

Helen Keller, Dhaka

Susan Eastman - HKI, New York
Martin Bloem - Country Director, Bangladesh
Mira Mitra - Ass. Country Director, Bangladesh
Mir Mahboob Ali - Project Coordinator

USAID, Dhaka

Sheryl Keller - Unit Coordinator of Research Evaluation and Monitoring

UNICEF, Dhaka

Flora Sibanda - Head VA Program

East Asiatic Adv. Ltd., Dhaka

Aly Zaker - Managing Director
Wazir Sattar - Director, Creative Services

Appendix I

Helen Keller International
Bangladesh

VITAMIN A INTERVENTION

Media and Creative Strategy: Agency Brief

Richard Pollard
Marketing Specialist
The Manoff Group, Inc.

The Importance of Vitamin A

Vitamin A is an essential vitamin. Lack of adequate intake may lead to deterioration in eyesight; to night blindness, to white frothy spots forming in the eyes called Bitot's spots, and to a complete white covering of the cornea which causes blindness.

Dietary sources of vitamin A include mother's milk, orange roots such as sweet potatoes; orange pulpy fruits such as ripe papaya; yellow and orange vegetables, in particular carrots; and dark green leafy vegetables (DGLV's).

Where supplementation is required, vitamin A deficiency can be prevented with only two high potency capsule doses per year - one every 6 (six) months. Vitamin A is stored in the liver; however, oil or fat is required to allow absorption. Night blindness and Bitot's spots can be reversed through vitamin A supplementation or a sufficient increase in natural vitamin A-rich food intake.

About 30,000 children go blind every year in Bangladesh through vitamin A deficiency. Studies, in particular in Indonesia by HKI and Johns Hopkins University, have indicated that reductions in child morbidity (illness) and mortality of up to 35% have occurred where vitamin A supplementation has been given, although the precise medical reasoning for this is still under investigation. As a result of these studies, there has developed a considerable interest in expanding vitamin A interventions worldwide.

In general, the first priority in areas where vitamin A deficiencies exist has been to introduce capsule distribution on a targeted or biannual basis. However, it is also realized that, on national levels, capsules must be gradually replaced by intake from natural food sources, because the cost of sustaining preventive capsule distribution is substantial particularly if valuable foreign exchange must be used to purchase the capsules.

Therefore, it is generally accepted that preventive capsule distribution is a temporary expedient. The long-term solution to vitamin A deficiency is to encourage greater consumption of vitamin A-rich foods, initially in areas where sources are adequately available and affordable; and through the development of market gardens, in areas where the DGLV's are not available. Some research is also underway to improve the vitamin A content of food stocks. In Wisconsin, for example, a super carrot containing ten times the usual vitamin A content has been developed and is now undergoing field trials.

To date, little work has been done internationally to understand the attitudes, behavior, and practices of mothers towards feeding their children more vitamin A-rich foods. These are areas where supply is adequate but consumption is low. Also, research needs to be done to ascertain the most practical and economical methods for changing existing attitudes and behavioral practices.

USAID in particular has allocated funding to support social marketing programs for such trial projects. The first to be implemented are test studies in West Sumatra (Indonesia), in Thailand, and the Philippines as well as in Bangladesh. These projects are expected to provide valuable inputs into the most efficient methodologies to be employed to accomplish these aims, on an international basis.

Background to Bangladesh

Recent studies show that, in Bangladesh, seventy (70) million people are deficient in vitamin A intake. Also, almost one million children suffer from some form of eye disease due to this deficiency, leaving 30,000 children blind each year.

In Indonesia, children deficient in vitamin A were found to have twice as much respiratory disease and almost three times as much diarrheal disease as other children, regardless of their general nutritional status. Since these diseases account for 2/3 of child deaths, focus on vitamin A deficiency control could be expected to have a major impact on child illness and mortality. Also, controlling the deficiency will prevent night blindness and nutritional blindness.

Vitamin A deficiency in Bangladesh is thought to be worse now than 23 years ago. Per capita daily consumption has declined from 93% of daily requirements in 1964 to 38% in 1987.

In response to this situation, and following a WHO recommendation, the government commenced a vitamin A capsule distribution campaign to all children between the ages of 6 and 60 months, in 1973. The capsules are distributed on a targeted house-to-house basis twice a year by Health Assistants in all rural areas. It is estimated that present coverage is 35.2%.

Current efforts are underway to improve the training, motivation and supervision of this supply effort. This is being primarily accomplished through UNICEF with HKI support (capsules are now to be distributed via Health Assistants and Family Welfare Assistants). Little effort has been extended in the area of creating a demand from mothers for the capsules, or towards the long-term objective of improving consumption of VA rich foods.

This pilot project aims to determine how best and most economically this task can be accomplished.

The Test Market Area

Comilla District has been chosen as the test market area. This is one of the 7 districts in the country with the highest prevalence of xerophthalmia.

Basic Data

Population: 3.5 million

Pregnant mothers:	400,000 app.
Locating mothers:	400,000 app.
Children 0-60 months:	816,000 app.

Number of Upazilas:	12	
Unions:	170	
Villages:	2,160	
Health Assistants:		771
Family Welfare Assistants:		472

Behavioral Objectives

I. Capsule Distribution

a) Providers
The providers from the national level to the HA's and FWA's will be more motivated to correctly distribute Vitamin A capsules (VAC) to all children 6-60 months old. This is to be done twice a year.

b) Husbands and Mothers with children age 6-60 months
VAC will be requested from HA's/FWA's and ensure their children receive them.

II. VA Nutrition Campaign

a) Husbands and Mothers
Mothers will ask husbands to get (from market or village) an adequate supply of vegetables to feed their 6-60 months old children VA rich foods, in particular DGLV's and pumpkin, every day.

Mothers will obtain DGLV's and pumpkin from their own garden or from a neighbor.

Mothers will add DGLV's and/or pumpkin to their child's regular diet every day.

b) Family Members
Family members such as mothers and sisters-in-law and elder children will actively support the mothers.

c) Community
The community at large, including health workers, doctors/midwives, religious leaders, school teachers and all other formal and informal respect/authority figures, will know about the program, understand its purpose and benefits, and support it as appropriate.

d) Institutional Support
The project will be approved and supported by all relevant Ministries, aid agencies and NGO's on both national and district levels.

Target Audiences

The formative research outlined the target audience breakdown:

Primary Targets:

- o Pregnant Mothers
- o Lactating Mothers
- o Mothers of 6-12 month old children
- o Mothers of 13-60 month old children
- o Husbands

Secondary Targets:

- o Mothers-in-law
- o Sisters-in-law
- o Other older family members
- o HA's and FWA's

Tertiary Targets:

- o Formal and informal authority figures
- o Health and traditional health providers

Budget

The budget established for the program is US$90,000.00 for media and media materials. Out of this, a reserve of US $15,000.00 should be set aside for modifications to the program after monitoring.

This budget includes the cost of producing a draft proposal, production of media materials in pretesting form, pretesting of materials in the field, and revising materials after pretest and production. The budget also includes all media dissemination costs including (if proposed) erection of outdoor and point-of-sale materials, and promotional efforts.

However, the agency is free to propose additional budgets should they feel this is required to ensure necessary impact.

Time Scale

Draft agency presentation	- October 8
Approval by	- October 12
Presentation of materials for pretest	- October 31
Presentation pretest results	- December 10
Final approval program	- December 15
Launch date	- February 1

The Client

Your client is Helen Keller International, Bangladesh. The Country Director is Dr. Martin Bloem, and the Project Coordinator is Mir Mahboob Ali.

Social Marketing Format

The project is utilizing a social marketing format supported by The Manoff Group, Washington, D.C.

Social marketing is a disciplined methodology designed to go far beyond the simple educational process, one that will lead to real and permanent behavioral change.

Education accomplishes its task once the knowledge to be transmitted has been successfully received by the recipient. There is, more often than not, little concern for what use or what purpose is made of the knowledge obtained.

Social marketing takes as its basis the experience of commercial marketing, whose objective goes beyond education alone, and is essentially designed to ensure purchase or action.

Our social marketing task is even more difficult than that of commercial marketing in that the latter is essentially satisfied with switching consumers from one brand to another. Our competition in the nutrition field is to do nothing or wait until illness strikes and endeavor to cure it.

We are required to pay more attention to consumers' attitudes and resistances to action and to the entire creative process. The agency needs to be aware of this.

The social marketing format is as follows:

Activity 1 - Formative Research

The first round of research established a clear understanding of present attitudes, behavior and practices of target audiences relating to feeding practice, in general, and VA-rich foods, also providing a perspective into the difficulties and resistances that target audiences face in undertaking consumption of VA rich foods. Existing communications channels were also probed, including the contact with Health Assistants and Family Welfare Assistance.

Activity II - Formulate Intervention Strategies

The formative research allowed us to define the precise interventions/activities we wish the target audiences to perform and to work up the precise words to be used that will overcome all the resistances the mothers may face, using an acceptable and persuasive authority 'voice', to convince the mother to take the desired action.

The intervention 'words' employed are attached in Appendix II and form the basis for all ongoing creative direction.

Activity III - Test the Strategy

The research field team then visited mothers and using the intervention words encouraged them to undertake the tasks proposed for six days. The mothers were then revisited and the extent to which they had accomplished the task analyzed.

In this case, the results obtained were highly successful, and significant increases in consumption of VA rich foods were accomplished by all targets. Some minor improvements were then made to the precise interventions. The summary result of the intervention test is included in Appendix III.

Activity IV - Produce Creative and Media Brief

As per this document.

Activity V - Appoint Advertising Agency

Activity VI - Produce Draft Messages, Materials and Media Plan

Now requested. The message development now takes the precise words used successfully in the intervention test (Appendix III) and adapts them to each medium of communication in exciting, culturally relevant, practical, believable and entirely convincing ways that will ensure real behavioral change through a carefully crafted media and communications delivery plan.

Activity VII - Pretest All Materials

All messages and materials will then be pretested.

Activity VIII - Amend Materials

The materials are then fine-tuned as a result of the pretesting

Activity IX - Finalize Program

The whole program is now finalized and a complete presentation document produced.

Activity X - Produce Materials/Final Media Plan

The materials can now be produced in final form and the media plan and budgets approved.

Activity XI - Baseline and Evaluation

A quantitative baseline study is now undertaken against which the program can be evaluated after two years.

Activity XII - Orientation

To train relevant HA's and FWA's, orient the health system, and support agencies to the project.

Activity XIII - Launch Effort

To launch the effort.

Activity XIV - Monitoring

To monitor implementation of the effort to ensure all components are established; to monitor the impact of the effort every six months and review/revise messages and or media used if required.

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Advertising Agency Responsibilities

The agency shall have the following responsibilities:

1. To become completely conversant with the social marketing methodologies being employed.

2. To allocate to the project one permanent social marketing-oriented account executive to be responsible for all client contact and to ensure that all deadlines are met.

3. To become fully conversant with the formative and intervention test research; to obtain from HKI original language transcripts for use in producing creative materials that employ appropriate language and phraseology in the local dialect.

4. To assist in finalizing the creative, media, and strategy document.

5. To produce print and audio material for pretesting.

6. To review pretesting research results and adapt materials and messages accordingly.

7. To arrange placement and monitoring of all media materials.

8. To endeavor to obtain commercial sponsorship for suitable print materials and promotional efforts, where possible.

9. To arrange production and erection of all billboards, banners, and posters, as required.

10. To assist in arranging promotions in markets and villages, as requested and required.

11. To produce and monitor budgets.

12. To prepare a presentation on the project, including slides, and to make at least three project presentations.

13. The agency is to record all meetings with the client in the form of a client contact report, to be delivered to the client within 48 hours of each meeting.

Media Strategy

Media means all communications channels that can be utilized/developed to communicate with target audiences, bearing in mind cost, sustainability and management constraints.

The programs aim is to define, through this test market area, what level of behavioral change has occurred as a result of the weight of communications effort that reached target audiences over the time span of the project. Out of this we can calculate the cost of the effort to achieve the result.

The objectives of the media plan are to ensure that a majority of the total population knows of the intervention; that these support groups closest to mothers both know, understand, and support the intervention action; and that the mothers understand and take the actions proposed.

The weight of communication achieved must be replicable to the wider context of launching the project on a national basis at the same or lesser cost. This must be taken into account when choosing the type of media channels to be used. Note that we refer to the weight of communication achievable and not rigidly to specific media use. It may be practical to select a different media mix in the test market area, than one would use for a national campaign. This is permissible providing one is not injecting a weight of effort which is not replicable on a wider scale.

Channels of Communication

The following are notes concerning potential communications channels that came out of the formative research in the intervention area. This research was qualitative in nature; therefore, it is not an accurate statistical yardstick but only a general guide:

- the target mothers came into contact with few external communications sources at all, beyond the limitations of their family and neighbors; their travel patterns were negligible; even shopping being performed by husbands.

- less than 1/2 of the them listened to radio with any degree of frequency and then often passively. Stations noted were Dhaka, Comilla, Chittagong, Khulna, and Agartola. The most popular programs were songs, drama, and family planning. The most popular times to listen varied, but mainly centered around noon, and 8-10 p.m.

- o between 1/4 and 1/3 watched television occasionally (usually at a neighbors' house)

  The most popular programs were drama, film, and to a lesser degree, family planning. The most popular time for viewing is 6-8 p.m.

- o hardly any of the mothers ever went to the cinema, moving pictures, or jatra/jari gaan.

- o a few mothers read newspapers, such as Ittefaq, Dainik Bangla, and Bichitra.

- o About half the mothers had ever met an HA or FWA, and they did not seem to have been offered any tangible or meaningful advice.

- o generally there was no village-based cooperative, welfare, or community institutions as support groups for mothers.

In comparison, husbands were much more mobile and open to communications contact points.

- o 3/4 listened to the radio
- o 1/2 watched television
- o about 12% went to the cinema
- o about 12% attended village clubs
- o over half had met the HW and FWA and most respected their advice
- o most went to markets

The agency is to review the above information in light of other data they may possess and come up with a proposed media plan (including outdoor and point-of-sale) with reasonable estimates of weight and frequency of contact per medium.

NOTES

1. The VA capsule campaign to run two months in the year; the VA nutrition campaign the other 10 months. The two campaigns will be budgeted separately.

2. The client will develop the HA and FWA as VA capsule distributors and as nutrition communicators. The agency will be asked to produce some print material for these purposes from designs and copy provided by client. TK. 50,000 should be reserved for this.

3. The agency is to consider the development of other specific communications channels beyond these noted above, such as folk media, the rent or hire of audio or audio-visual media, use of any existing audio/audio-visual networks, etc., keeping in mind the cost and management/replicability constraints.

4. In view of the probability that no media plan will offer an adequate depth and weight, attention needs to be addressed to developing indirect contact such as through husbands. In this case promotional activities at village clubs and at the markets themselves (the point-of-sale) would be useful. They could provide the message content positively, reinforcing the objective that the husbands do talk to the mothers.

5. The media plan must also cover the secondary and tertiary targets to ensure support, as well as a small P.R. budget for releases to national media over the cause of the project but in particular at the launch phase.

6. It is possible that the HA and FWA may be able to put up promotional banners or flyers to support the VA capsule promotions. There are 1,243 of them in Comilla district.

Creative Strategy

The creative task is to transform the words successfully used in the intervention test to convince mothers to feed more vitamin A rich foods into compelling media messages.

To support this creative process, a review of relevant research findings is found below.

1. Research Findings

Health Status

A little under half the pregnant mothers and about 2/3 of lactating mothers felt unwell or were ill, and those with 0-60 month old children felt that about half of them were ill, or not well.

In general there was a relatively passive attitude to taking steps that could improve health status, except for general beliefs about eating better or taking medicine, neither of which was accomplished.

Despite and indication of a high degree of attitudinal acceptance by mothers, there is a clear need for education to reinforce action to improve nutrition.

Vitamins and Vitamin A

The word 'vitamin' was known but not vitamin A. In general, mothers understood that vitamins were health promoting.

Vitamin A-Rich Foods

All vitamin A-rich foods were acknowledged as health promoting but all were very low on the list of priority foods.

None of the children ages 6-12 months received any vitamin A-rich foods beyond breastmilk. Only 20% of the children ages 12-60 months old received VA-rich foods. All the children in this older age group were given animal foods such as milk, fish, beef and eggs.

The status of vegetables needs to be raised so that consumption becomes an essential part of the diet.

Night Blindness

In general mothers knew of night blindness and regarded it as serious, but few understood that it could be cured through intake of vitamin A-rich foods.

Authority Figures

As regards health problems, mothers said they simply discussed them with husbands or elder family members. There was no village-based authority on such subjects. However, messages from doctors were clearly believed and credible.

2. Brand Positioning

To take the commercial term of brand positioning, it is clear that the image of vitamin A-rich foods requires a considerable 'repositioning' in the minds of mothers. The 'value' of DGLV's and orange fruits/vegetables needs to be raised from that of a secondary food-stuff to one of primary importance (along with breastmilk and foods the mothers and children eat).

The rationale behind this brand positioning must include the 'value' of these foods in curing/preventing night blindness, **but to concentrate on this alone may reinforce the limited value of them;** therefore, vitamin A-rich foods need to be also promoted as valuable in improving overall health status.

3. Resistances

Aside from the generally low image of vitamin A-rich foods in the minds of mothers, some specific resistances persist.

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i) Some cause diarrhea/stomach pains.
This resistance was overcome in the intervention testing by selecting those least known to cause these problems (see vegetables proposed in Appendix II). By explaining that if DGLV's are well cooked, and well mashed, this problem is avoided (with the authority of a doctor).

ii) Children do not like DGLV's
Here we express to the mothers that this is normal, particularly with very young children, receiving a new taste sensation for the first time. It is necessary to try a little at a time and perservere so that eventually the child will get to like it. With older children the key is to suggest the mother try different ways in preparing the vegetables to find out which way is more successful.

iii) They are not easily available
This resistance appears to be a combination of factors; the season, affordability, and lack of motivation from the husbands to provide the vegetables. However, in the intervention testing it appeared that once it was made clear that vegetables are obtainable not only from markets but from within the village itself, plus the possibility of substituting pumpkin, the mothers were strongly motivated to obtain them, and almost all mothers did succeed in doing so.

Creative Directions

i) Radio

It is clearly impossible to pack the total message into one 60-second radio spot!

Experience to date has shown us that in radio it is necessary to breakdown the total message package into a series of spots.

As a guide only for the creative team, the series could be as follows:

General Themes-

- One or more general spots which through the creative use of songs or traditional poetry tackle the 'image' issue of vegetables.
- One spot addressed to mothers of ages 6-60 month-old children, stressing the need for VA-rich foods every day and overcoming the resistance to diarrhea.
- One spot addressing the issue of need and availability centered around the mother's request to the husband to supply the foods.

Targeted Spots

- to pregnant mothers on the issue of her health and that of her unborn child, to eat every day
- to lactating mothers stressing her health and the benefit to her child through her breastmilk; a second spot concentrating on the resistance that her fortified breastmilk causes her child stomach pains
- to mothers with children ages 6-12 months, practice feeding by quantity "some mashed ... every day".
- to mothers with children ages 13-60 months on the feeding practice and quantity "1/2 bowl every day".

If followed, this would give a total of nine spots. The media plan would then require a relatively large number of spots to be broadcast and a high frequency to gain the required coverage. Consideration needs to be given to whether or not to mix up the spots, or broadcast each of them over longer periods by rotation.

Notes on Radio Spots

Experience has shown us that pure announcement spots are rarely effective. The ambience of the spots needs to be interesting, attractive, culturally relevant, and caring.

An example of a radio spot used in Indonesia may be useful; This spot was aimed at addressing the diarrhea resistance and as this resistance is stronger with the youngest children, a mother with a 6 month old child was chosen.

Mother: Mother-in-law, what are you putting in my baby's rice porridge?

Mother-in-law: Oh! Some cooked, chopped vegetables and a drop of oil.

Mother: Where did you get that strange idea?

Mother-in-law: I heard it from a doctor on the radio. Listen!

Doctor: After six months all children need dark green vegetables every day to keep them healthy and strong.

Mother: But, mama, a child of that age cannot digest vegetables.

Mother-in-law: She-h Listen!

Doctor: A six month old child can easily digest vegetables and avoid diarrhea if the vegetables are well boiled and well mashed.

Mother: Well, to keep my baby healthy and strong I must give my child after six months, boiled and mashed vegetables, with a drop of oil every day!

Mother-in-law: Yes, we are finding new and good ways now to keep our children healthy.

Mother: Come, my baby, it's time for your daily vegetables!

Note here that we use a doctor to reinforce the message and carefully repeat the action we require the mother to take as often as possible. The spot also develops the cultural relationsnip between mother and mother-in-law, as well as clearly and honestly addressing the mother's concern about diarrhea and convincingly answering these concerns.

ii) Television
It is possible that owing to cost factors, TV film spots would be prohibitive. Telops might be useful perhaps only on the general themes outlined above.

iii) Posters

Experience to date is that posters lack any real ability to generate enough message content to lead to behavioral change on their own. They are only useful to give a simple visual reminder of messages given over radio/television or from health workers.

The VA Capsule Campaign

We have not provided any detailed research findings to aid the creative process for the twice yearly VA capsule campaign. Primarily because our experience to date shows us that it is not necessary to consider any major resistance points for this product. Creatively the VA capsule can be treated as a commercial product that is given free now, by HA's and FWA's. Also emphasized is the beneficial effects to your child's health and the protection it provides against serious illness. The creative key is to address advertising to the target audience, mothers with children ages 6-60 months, and get them to go (or the husband) to the nearest HA/FWA and demand the capsules. This key can take an 'announcement' form.

Appendix II

INTERVENTION MESSAGES: ENGLISH VERSION

PREGNANT WOMEN

Doctors say that a pregnant woman like you should eat green leafy vegetables (GLV) like helencha shak, kalo kochu shak, lal shah, pui shak and shajna shak everyday.

- Eat at least one (1) bowl of green leafy vegetables everyday.
- GLV's are rich in vitamins and will prevent the child inside you from night-blindness, which is a serious disease and can even turn to total blindness.
- It will give you strength and help your baby grow healthy and strong, resisting other diseases.
- If you really want to eat GLV everyday you can collect it from the field, around your house, or from the market.
- Every time your husband goes to the market, ask him to bring a variety of GLV for you.
- You will find that some GLV or the other is always available. Remember all GLV are good for you. If it is not available in abundance, add it to other vegetables or fish.
- If you are not able to find a GLV on certain days, eat one (1) bowl of 'misti kumra' which is also rich in vitamins and gives the same protection.

NURSING WOMEN

Doctors say that nursing mothers like you should eat green leafy vegetables (GLV's) like helencha shak, kalo kocho shak, lal shak, pui shak, and shajna shak, everyday.

- Eat at least one (1) bowl of greens everyday.
- GLV's are rich in vitamins and will protect the child that you breast-feed from night blindness, which is a serious disease and can even turn into total blindness.
- It will also give you strength and help your baby to grow resistance to other diseases.
- Doctors say GLV's eaten by nursing mothers do not upset or cause stomach pain (nari betha) in the breastfed children.

- If you really want to eat a GLV everyday you can collect it from the field, around your house, or from the market.

- Every time your husband goes to the market, ask him to bring a variety of GLV for you.

- You will find that some GLV or the other is always available. Remember all GLV's are good for you and the breast-milk for the child. If it is not available in abundance, add it to other vegetables or fish.

- If you are not able to find a GLV on certain days, eat one (1) bowl of 'misti kumra' which is also rich in vitamins and gives the same protection. Do not worry, doctors say that 'misti kumra' does not cause stomach upset/pain ('nari betha').

MOTHERS OF 6-12 MONTHS OLD CHILDREN

Doctors say that the 'tola khabar' given to the child from 6 months onwards, should include mashed and softened green leafy vegetables like helencha shak, kalo kocho shak, lal shak, pui shak, and shajna shak everyday.

- Take a few leaves form the cooked vegetable, mash them well and add it to the child's' soft rice.

- GLV's are rich in vitamins and will protect the child from night blindness, which is a serious disease and can even turn into total blindness.

- It will also give your child resistance to other diseases.

- Doctors say that well-mashed GLV's can be easily digested by the child. It does not cause stomach upset or pain ('nari betha').

- If you want to feed your child a GLV everyday, you can find it from the field, near your home, or from the market.

- Every time your husband goes to the market, ask him to bring a selection of GLV's.

- You find that some GLV's or the other is always available. Remember all GLV's are good for your child.

- If you are not able to find GLV's on some days, add well-mashed 'misti kumra' which is also rich in vitamins and also gives the same protection to the child. Do not worry, doctors say that 'misti kumra' does not cause stomach upset/pain ('nari betha').

- It is also true that many children resist the taste of vegetables, particularly if they have not had them before. This is normal. The child needs to get used to any new taste. Try it little by little and perservere. Your child will soon acquire a taste for the GLV's.

MOTHERS OF 13-60 MONTHS OLD CHILDREN

Doctors say that you should feed GLV's' such as... to children 13-60 months everyday.

- Give at least 1/2 bowl (100 mg) green leaves everyday.
- If the child still eats soft rice, mash the vegetables with it.
- If the child does not eat spices, take out 1/2 bowl of green leafy vegetables, while you are cooking it, before adding the spices.
- GLV's are rich in vitamins and will prevent the child from night blindness, which is serious and could turn into total blindness.
- Doctors say that green leafy vegetables can be easily digested by small children and do not cause stomach upset or pain ('nari betha').
- If you want to feed your child a GLV everyday, you can find it from the field, near your home, or from the market.
- Every time your husband goes to the market, ask him to bring a selection of GLV's.
- You find that some GLV's or the other is always available. Remember all GLV's are good for your child.
- If you are not able to find GLV's on some days, add well-mashed 'misti kumra' which is also rich in vitamins and also gives the same protection to the child. Do not worry, doctors say that 'misti kumra' does not cause stomach upset/pain ('nari betha').
- Some children find the taste of GLV's not to their liking; this is normal. Try different kinds of vegetables, prepared different ways until you find one your child likes. Perservere until he acquires the taste for GLV or pumpkin everyday.

Appendix III

INTERVENTION STRATEGY TESTING

SUMMARY OF FINDINGS

From Ashok Sethi

Objectives

- Based on the prior research findings of the mother's behavior, beliefs, and attitudes about vitamin A (VA) -rich foods, intervention strategies or concepts were formulated, to attempt to bring about the desired behavioral change.

- Essentially, these concepts were the essence of the tentative messages which need to be targeted at the mothers and need to include:

  - the precise expected behavior
  - the key resistance points
  - a tenable promise

- In this research study, these concepts were tested to assess their:

  - comprehension
  - credibility
  - feasibility
  - acceptability

- The expected result was to have a fine-tuned message skeleton which could be creatively translated into final messages and materials.

Overall Comprehension and Credibility of the Interventions/Concepts

- In general, the messages were understood and readily believed by the mothers.

- Incomprehension, whenever found, was restricted to a few words/terms rather than the content.

- Key areas of incredibility or disagreement with the concepts were the same resistance points, which the concepts tried to address:

  - fear of diarrhea/stomach pain
  - children's dislikes

- The only major element of the concepts disagreed with was the possibility of their husbands bringing 3-4 types of GLV's every time they went to the market, because of financial or availability reasons.

Pregnant Mothers

- While 5 out of 14 pregnant women did not have a GLV in the 6-day period prior to the investigative visit, only two (2) did not have it in the following six (6) -day period.
- Average frequency of consumption went up from 1.1 out of 6 days to 3 out of 6 days - indicating a substantial success of the intervention.
- The two pregnant women who did not take GLV's or pumpkin, on any of the 6 days following the concept exposure, did so because of:
  - dislike of GLV's
  - non-availability
- The major deterrents to daily consumption appear to be linked to availability - only 1 pregnant woman also mentioned viability to digest as an additional reason.
- Of the meals in which GLV's (or pumpkin) are eaten, at least one (1) bowl is consumed. More than one bowl of GLV's are consumed in one meal out of four.
- Those who could not consume the suggested quantity of one bowl, were basically prevented by lack of availability.

Nursing Mothers

- Half the nursing mothers did not have a GLV at all, in the 6-day period before the investigator visit. However, after the visit, all except one out of 14 mothers had a GLV in the following 6 days.
- Average frequency of consumption went up from 0.7 out of 6 days to 4.6 out of 6 days. In addition, ten out of 14 mothers had GLV's 5-6 days out of a 6-day period.
- The lone non-consumer was reportedly prevented by lack of availability.
- No specific reasons, except lack of availability were mentioned as the resistances to daily consumption.
- Almost all nursing mothers consumed 1 bowl or more at a meal, the same as the suggested quantity.
- As for pregnant women, lack of availability of the required quantity was stated as the major reason for not eating the desired amount.

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Mothers of 6-12 Months Old Children

- None of the 6-12 months old children were given green leafy vegetables; however, after the intervention was explained to them, almost all of them were given a GLV at least once in the following 6 days.
- Two of 13 mothers gave GLV's all 6 days and another 4 gave it to them 5 out of 6 days.
- On an average, a mother gave GLV to the child 2.9 out of 6 days.
- Hence, overall acceptability of the concept seems to be reasonably high.
- The quantity fed was invariably 1 tablespoon or less. It may be worthwhile to add a suggestion on quantity for this segment, around 2 tablespoons.

Mother's of 13-24 Months Old Children

- Half of the mothers did not feed any GLV's to their 13-24 months old child in the 6-day period before the exposure to the concept. All of them fed it at least once, in the 6-day period following the concept explanation.
- Average frequency of consumption went up from 0.7 out of 6 days to 4.8 out of 6 days, with half of them feeding it all the 6 days.
- Overall success received, therefore, seems very high.
- Fear of diarrhea, lack of availability or time, are some major reasons for not feeding GLV's everyday.
- The quantity of GLV's, (or pumpkin) fed in a meal was invariably very small (less than 1 tablespoon, against a suggested quantity of 1/2 a bowl). The message about adequate quantitative consumption should be given prominence for this segment.
- Fear of diarrhea, child's dislike of GLV's and inability to obtain GLV's in desired quantity were the key reasons for inadequate GLV consumption among children in this age group.

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Mothers of 25-60 Months Old Children

- The non-consumers of GLV's declined from 5 out of 14 to 1 out of 14 - following the exposure to the concept.
- Average frequency of feeding increased from 1.2 out of 6 days before the concept exposure, to 3.5 out of 6 days after the concept exposure.
- Overall acceptance of the advice was substantial in this segment also.
- Child's refusal to consume GLV's was the reason mentioned for the one child who was not fed GLV's at all.
- The quantity consumed here per meal was about 1/2 a bowl - the same as the suggested quantity.
- Those who did not feed the suggested quantity, were basically faced with the fact that the children did not like the GLV's.

Conclusions

- The overall acceptance of the concepts has been quite high in terms of the mothers' reactions and the extent to which they were able to follow the advice. In general, a fair amount of success was achieved in changing the behavior (at least temporarily) in the desired direction.
- All the key resistance points were included in the concepts, which were sometimes reiterated by the mothers. The only exception was the child's dislike for GLV's, which could be creatively addressed in the final messages.
- Quantitative inadequacy remains a problem for children under 2 years, because of strong fear towards indigestibility. Specific emphasis needs to be given to this aspect of the message.
- The promises made in the messages were found credible by all.
- Overall, the concepts provide a good starting point for the development of the final messages.