

INFANT FEEDING STUDY

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Third Interim Progress Report

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The Population Council

Columbia University

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I. OVERVIEW OF STUDY PROGRESS

During the first half of 1982 data collection for the Infant Feeding Practices Survey was completed in all four countries (Colombia, Kenya, Indonesia and Thailand)* and data processing activities began. Survey instruments, where necessary, were translated into English and those questionnaire translations that have been reviewed for correction by the research teams are included in Attachment B. The Consortium developed and distributed to the field teams a document providing guidelines for data analysis (Attachment D). This document has been helpful in providing direction for the analysis in each country and will be particularly useful in preparing for the comparative analysis of data that will be conducted in New York in November, with participation from each survey team.

Draft reports on the Phase 1 ethnography were completed during this period and Phase 2 ethnographic field work began.

In general, the marketing study proceeded at a slower pace than anticipated. Problems with the exchange of materials through the mail delayed the completion of the State of the Industry report for Colombia. Lack of communication from the field in Indonesia and Thailand made it difficult to assess progress and on-site needs. Technical assistance visits to both of these countries enabled the Consortium to identify the delays and encourage country principal investigators to devote increased attention to the progress of this component. It is anticipated that remaining work on the health service

*Collaborating Institutions: Javeriana University, Bogota; Mahidol University, Bangkok; Diponegoro University, Semarang; Central Bureau of Statistics (CBS) and African Medical and Research Foundation (AMREF), Nairobi.

infrastructure study, the government and industry interviews, and the retail audit will be completed in all sites within the second half of the year.

Specific information on study progress in each participant country is described in the following sections of this report.

II. CROSS-SECTIONAL SURVEY

Progress To Date

During the first half of 1982, collection of survey data on determinants and practices of infant feeding was completed in Indonesia, Kenya and Thailand. Data collection in Colombia had been completed in late 1981 and was discussed in the last interim progress report.

Data processing also was initiated in all sites within the period covered by this report. In all countries data collection and data processing were major undertakings involving a great deal of effort and time from each research team. These activities were conducted under the direction of the following country team Principal Investigators: Lic. Belen de Paredes, Colombia; Prof. Moeljono Trastotenojo, Indonesia; Dr. John Kekovole with assistance from Mr. Terry Elliott, Technical Coordinator, Kenya; and Dr. Somchai Durongdej, Thailand. In addition, Dr. Michael Latham and Dr. Lani Stephenson from Cornell University, who were in Kenya during this report period, were able to provide assistance and advice regarding the work there.

Data Collection

Indonesia: The final survey instrument was pretested during the first week of January. Interviewing took place from February 4 to March 13. A total of 1,327 interviews was completed in 67 census blocks of Semarang. In each block interviews included women who had borne a live infant during the preceding 24 months. Dr. Fatimah Moeis played a major role in survey supervision.

Kenya: Interviewing began on March 8 and was completed in June. A total of 955 interviews was completed with women who had borne a live infant during the preceding 18 months. The original sampling design included 43 low and

middle income enumeration areas in metropolitan Nairobi, however, because the number of eligible infants in these households was only 700, the sample was augmented to include some additional low and middle income enumeration areas. The data will be coded in order to permit separate analysis of the original and augmented samples, but CBS believes the augmented sample is unlikely to differ from that of the original enumeration areas.

Thailand: Data collection took place from March 1 to April 16. A total of 1,454 interviews was conducted with women who had experienced a live birth in the preceding 12 months.

Data Processing

Colombia: Data coding began on April 30, after some delay due to the processing of a contract amendment to open a data processing line item in the existing contract budget. By the end of June, data coding and entry were completed and data editing had begun. Dr. Virginia Hight Laukaran met with the Javeriana research team in June during a trip to Bogota on other business for the Population Council. She was able to discuss plans for data analysis with the team members and review some of the preliminary data runs.

Indonesia: Data coding was begun immediately upon completion of the household interviews and continued through the end of the project period. Dr. Budioro is in charge of this activity.

Kenya: Data coding and entry were completed by June 30 in Kenya. Dr. Cecily Resnick was engaged as a consultant to assist Dr. John Kekovole and Mr. Terry Elliott with computer programming during the data entry phase.

In-country Data Analysis Plans

The Consortium began planning for in-country data analysis in early March. Mr. Robert Smith was engaged as a consultant to participate in the planning and execution of data analysis. Under the direction of Dr. Laukaran, a detailed set of guidelines was prepared to assist in-country research teams with data analysis (Appendix D).

Future Activities

The goals for the next six months include the following:

- 1) Analysis of the data will be undertaken in each of the four countries.
- 2) On-site technical assistance will be provided in Indonesia and Thailand (Mr. Robert Smith and Dr. Giorgio Solimano in Indonesia, Mr. Smith and Dr. Beverly Winikoff in Thailand), to assist with in-country data analysis.
- 3) Data cleaning will be completed in all four countries.
- 4) Formats for comparative data analysis will be developed.
- 5) Comparative data analysis will begin as soon as duplicate data tapes from each country arrive in New York.
- 6) A meeting will be convened in New York in November with representatives of all four countries to lay the foundation for comparative data analysis and to revise draft documents for country reports.

III. ETHNOGRAPHIC RESEARCH

During this six month period, the four country teams completed the reports for the Phase 1 ethnography and began the process of translating, circulating or revising these initial drafts. The sites differed in their ability to undertake the task of analysis and report writing, and in some cases were significantly slowed by the volume of material that needed to be translated.

During this period, Phase 2 fieldwork was initiated and the experience from the first phase of fieldwork resulted in a much simpler and more efficient research style. The ethnographic teams have been in close contact with the staff working on the survey and marketing studies, and in some cases, have worked with them to complete overall study tasks.

The work has progressed well but unevenly over this year, but the problems encountered were handled with good will on all sides.

Progress to Date

Colombia: The complete report on the ethnographic component from the Colombian team was received in the early summer. Lic. Maria Eugenia Romero Moreno was largely responsible for the report which was submitted in Spanish. The Consortium and the Colombian team will collaborate on draft translations. The slowness of this process will delay revising the documents.

Indonesia: The objective of the site visit by Dr. Penny Van Esterik in June was to assist the Indonesian team in the analysis and writing of the Phase 1 ethnography. During this time period, most of the Indonesian sections were prepared in draft form by Dr. Nico Kana and the Indonesian study team,

and the English translations were begun (see Attachment C for site visit report). The work was very well done but the team lacked the capacity to prepare English translations. Translations were also an unanticipated expense for the team. During the site visit, plans were made with Ms. Suci and Ms. Rodiyah to begin the Phase 2 fieldwork after Ramadan in July.

Kenya: The complete report on the Phase 1 component was received during this period. The report from AMREF was written by the ethnographic team with an introduction from Dr. Norman Scotney and covered all subject topics. Dr. Van Esterik made suggestions for revisions and requested more information on some topics. The team indicated that they would make the suggested changes. During this period, the field work for the Phase 2 ethnography was carried out by Ms. Wamucii Njogu and Ms. Margaret Okello.

Thailand: The Thai report on the Phase 1 ethnography was written by Mr. Tawisak Svetsrini and the Thai team. The team was willing to make some revisions suggested by the Consortium. During the site visit by Dr. Van Esterik in June - July, these revisions were completed. The field work for the second phase was also completed during this period. A plan for analyzing this material was developed during the same site visit (see Attachment C for site visit report).

Ethnography Methodology Working Paper

During this time period, a paper was prepared on the ethnographic component of the study, emphasizing methodology, not results. The Consortium is reviewing the draft for a possible working paper. In addition, the anthropologists in each country will be invited to revise and expand Dr. Van Esterik's version to produce a document more reflective of the conditions and experience in their own countries.

Future Activities

During the next six months, our objectives include the following:

Colombia: The ethnographic report will be revised and translated into English. During the October visit of Maria Eugenia Romero Moreno to Cornell, the preparation of collaborative papers integrating the three study components will begin.

Indonesia: The final English version of the Phase 1 report should be received soon. If it is delayed, the Consortium will prepare an unofficial English version based on the Indonesian documents received. By October, the second phase should be completed with the reports in Indonesian ready by November.

Thailand: The second phase study should be analyzed and reported on by October. There is a great quantity of descriptive material in Thai, and it may be advisable to hire translators to help with the case studies.

Kenya: A site visit by Dr. Van Esterik in September - October should facilitate the completion of the second phase of field work in Kenya. In addition, there will be an opportunity to follow up on questions arising from the survey and marketing studies, and on work on the health infrastructure.

Delay in the receipt of reports prevented preparation of a document summarizing ethnographic results, and presented difficulties in planning for comparative work. As the final reports are received, this comparative analysis can be started, and the results of the ethnographies integrated with the other components.

IV. MARKETING STUDY

Progress To Date

Marketing activities continued at a slower pace than anticipated during the first half of 1982. Communication difficulties hampered efforts at closer coordination. However, within the period, data collection for the government, health infrastructure, industry and retail audit segments of the marketing study were well under way in all sites.

Colombia: Trost Associates, Inc. (TAI) completed a draft of the report on the Infant Foods Industry in Colombia. This report presented a synthesis of three volumes of raw data collected by Adela Morales de Look describing medical, government, and industry activity in the area of infant feeding. The report has been forwarded to the Colombia research team for review and comment. Prof. James E. Post, the Consortium's marketing consultant will be working with TAI staff and Colombia team members to complete a final version of this report before the end of the year.

Retail audit data collection was completed by December 1981. A two-phase study was launched because of the lack of relevant available information from which to draw the sample. A pilot study of retailers was conducted first and followed by an audit of 141 retail outlets. The raw data was submitted to TAI for analysis and was entered in TAI's computer during the first half of the year. A preliminary draft of the retail audit analysis has been completed and is undergoing further revision.

Indonesia: Market research in Indonesia is being conducted by both a private firm in Jakarta, In-Search, Inc., and a research team member in Semarang, Dr. Sahid. In-Search has completed its secondary research on the

infant formula industry, interviews with industry executives and government officials, and a retail audit of outlets in Jakarta. A background report on infant formula marketing in Indonesia is being prepared and a draft should be completed later this year.

Two site visits scheduled in the first half of 1982 provided the Consortium with updated information regarding the progress of the marketing study in Semarang. In February, Dr. Giorgio Solimano learned that Dr. Sahid and his assistant, Dr. Wiratno, had begun the audit of retail outlets but had only conducted 15 audit interviews out of the required 100. The medical infrastructure interviews, however, had not begun. Dr. Solimano met with Dr. Sahid to develop a sample that would include interviews with all relevant health personnel. Dr. Solimano noted there was a lack of coordination between Dr. Sahid and the other research team members. Except for input on the consumer behavior questionnaire, Dr. Sahid had been working independently and had shared little information with the research team or In-Search in Jakarta. Dr. Solimano emphasized to Prof. Moeljono the need to coordinate the marketing component with other study components, particularly with regard to the health interviews. Prof. Moeljono agreed to increase the involvement of the health faculty in this segment of the marketing study.

In June, Prof. James Post reported that Dr. Sahid had made considerable progress in his work since the last site visit. Draft reports were completed for Semarang on the state of the industry, retail audit, health infrastructure and interviews with midwives. Translation and analysis of these reports is underway at this time. The difficulty of coordinating the market research work with the ethnography and survey has persisted and it is apparent that

integration of study components will have to be accomplished centrally via the Consortium.

Kenya: By December 1981, the Central Bureau of Statistics had completed a draft report on government activity on regulations and on Ministry of Commerce Statistics relating to infant feeding in Kenya. Research Bureau, Ltd., (RBL) submitted the retail audit data it collected to TAI for tabulation and analysis in March. TAI's retail audit analysis should be completed by the end of October. A draft report on the state of the industry was submitted by RBL and additional details on marketing activity will be pursued during Dr. Penny Van Esterik's trip to Nairobi in the fall.

The medical infrastructure study is being conducted by the African Medical and Research Foundation under the direction of Dr. John Kigodu. A revised questionnaire was developed in the fall of 1981 and interviewing began in January of this year. The interviewing process has proceeded slowly due to the difficulty of scheduling meetings with high level officials. In addition, Dr. Kigodu was appointed to a new position with the Ministry of Health in the late spring. Dr. Kigodu will continue his work on this study segment, assisted by Dr. Christopher Wood, but it must be coupled with his new responsibilities. Data analysis should be completed in the fall.

Thailand: In Thailand, Deemar (a private research firm) has been contracted to undertake the retail audit and industry interviews. Dr. Thonglaw, a research team member at Mahidol University has responsibility for the secondary research, and the government and health sector inquiries.

After some delay early in the year, Deemar reached a final agreement with TAI on a contract budget, retail audit sample, and time frame, and began the

audit in June. The retail audit was completed in early summer and the data will be forwarded to TAI for analysis.

By the time of Dr. Solimano's February visit, Dr. Thonglaw had completed a draft of the survey instrument for the health infrastructure interviews. However, the research team proposed an increase in the sample which was modified by the Consortium and TAI to a final sample size of 108. Interviews began shortly after Dr. Solimano's visit. Prof. Post discovered in June, however, that less than 50% of the interviews had been completed. The timetable delay was attributed to the difficulty of securing appointments with higher-level administrators, and Dr. Thonglaw's full teaching schedule and administrative workload. By early summer, however, we received word from the Council's Bangkok office that interviews had been completed.

Dr. Thonglaw also made significant progress on the state of the industry report by the time of Prof. Post's visit. Unfortunately, however, he has not maintained regular communication with Dr. Somchai and other research team members. Thus coordination of Dr. Thonglaw's work with other study components has not been achieved and will be difficult to ensure in the future.

Marketing Hypotheses

In December 1981, Consortium staff met with AID Panel members Dr. Jean-Pierre Habicht and Mr. William Novelli to review the marketing component of the study. As a result of these discussions the Consortium agreed to prepare a memorandum to guide the development of two sets of marketing hypotheses in each country addressing the five research questions posed in the Consortium's conceptual framework document. One set of hypotheses would be formulated based on marketing information alone; the second set would include

hypotheses related to marketing which would be integrated with hypotheses for the other study components. Prof. James E. Post prepared a draft of this memorandum in early spring. Following his site visit to Indonesia and Thailand in June, the memorandum was revised to reflect his discussions with in-country researchers. The memorandum is included with this report as Appendix B.

Future Activities

During the next six months, project goals include the following:

- 1) The report on the state of the infant foods industry in Colombia and the analysis of Colombia retail audit data will be completed.
- 2) Draft reports from Indonesia on the state of the industry and health infrastructure will be revised and additional data related to the retail audit in Semarang will be pursued.
- 3) Additional information on the state of the industry in Kenya will be obtained and the retail audit analysis will be completed; data collection for the health infrastructure study will be completed and a preliminary analysis of results will be prepared.
- 4) Reports on the state of the industry and health infrastructure in Thailand will be completed and the retail audit data will be tabulated and analyzed.
- 5) Marketing hypotheses will be formulated for each country based on data collected.
- 6) Consumer Behavior data will be analyzed and reviewed in each of the four countries as part of the analysis of the infant feeding practices data sets.

SITE VISITS (See Attachment C for complete reports)

<u>Country</u>	<u>Dates</u>	<u>Purpose</u>	<u>Staff Member(s)</u>
Thailand	2/12-17/82	To provide assistance with survey implementation; planning for data analysis, and workshop proposal development; to follow up on marketing study coordination and field activity	Giorgio Solimano
Indonesia	2/18-24/82		
Indonesia	6/3-18/82	To assist the research teams with the following areas of the ethnographic study: completion of the Phase 1 report, development of a Phase 2 work plan (Indonesia), assistance with Phase 2 analysis (Thailand), planning for the integration of the ethnography with other study components	Penny Van Esterik
Thailand	6/25-7/12/82		
Indonesia	6/6-12/82	To provide assistance with the analysis and interpretation of marketing data and the general conduct of the marketing study	James E. Post
Thailand	6/13-19/82		
Colombia	6/28-7/2/82	To provide consultations on data analysis	Virginia Hight Laukaran



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Faculty Offices

TO: Consortium/Country Teams
FROM: James E. Post
RE: Progress on Marketing/Hypotheses
DATE: June 2, 1982

This memorandum is a follow-up to discussions among members of the Consortium and members of the A.I.D. Panel on the marketing component of the project. In the months since that meeting, the state of the industry and retail audit portions of the marketing research have been completed in Colombia, and are underway in Indonesia, Kenya and Thailand. The consumer behavior information in the infant feeding practices survey has not been analyzed in any of the countries. Data analysis plans are being prepared.

The enclosed memorandum should be used as a general guide in developing marketing hypotheses that each country investigator knows are appropriate to specific circumstances. We are looking to develop two types of hypotheses in each country: (1) those formulated with respect to marketing information alone, and (2) those relating to marketing which are integrated with other components of the study (e.g., employment, labor force participation, health provider practices).

Research on Marketing as a Determinant of Infant Feeding

Research on marketing as a determinant of infant feeding practices and behavior has been of two varieties. Some studies have attempted to examine impacts of specific marketing activities, such as sampling or advertising campaigns. Other studies have concentrated on developing an understanding of the environmental context in which infant feeding choices are made in the marketplace. The two types of research are complementary and, in some respects, quite interdependent. This research project is organized to begin with reliable baseline data on the environment in which marketing activities occur, and proceed to the analysis of more precise associational and causal relationships as the data permits. Five basic research questions have been articulated to focus and guide this research process. Each is reviewed below in light of recently received data and discussions.

Research Question #1: What current practices and strategies characterize infant food marketing in each country?

Research Question #2: What factors account, in whole or in part, for the current marketing environment?

As mentioned above, there are no systematic baseline studies of marketing practices in the infant foods industry of each country. Thus, an important need for the project, and a difficult challenge for the research team in each country, has been preparation of a thorough and comprehensive understanding of the factors and forces that influence the competitive environment. Secondary research and preliminary field information suggest that a number of important variables will influence competitive conduct in the marketing of infant foods. These include government policies directed at the structure, behavior or performance of industry in general, and the food industry in particular; availability of natural resources for processing into commercial infant foods; the

number of manufacturers or producers of commercial infant foods; and the local or multinational character of these competitors; and the diffusion of technology required for the processing of various categories of infant foods (e.g., cereals, milks, formulas). Each of these variables are hypothesized to be influential in the shaping of competitive behavior, and preliminary field research underscores the importance of these factors.

Within each country, these hypotheses function as guides for examining specific influences on business behavior. The competitive behavior of a business organization is partially a function of what its managers want to do and partially a function of the economic, technological and public policy constraints imposed upon it by the external environment. At the national level, then, Research Question #1 is intended to yield an accurate description of what is occurring, and to explore those observable factors that are influential on industry behavior. In addition, the interviews with company managers and sales personnel will help shed light on the objectives of the infant foods companies, in terms of sales, market share and profits. Taken together, the analysis of constraints and goals should lay the foundation for a model of infant food industry behavior in each country. The model will be examined in relation to consumer behavior and feeding practices. This analysis, in turn, can be helpful to policymakers in government as they consider alternative courses of action to improve infant health and nutrition.

At a comparative level of analysis, this research plan has broader applications. We have noted, for example, that the degree of competition ranges from very open and active competition in Thailand, to a single seller's dominance in Kenya, to local companies vigorously competing against multinational companies in Indonesia and Colombia. These structural variations will, predictably, have consequences in terms of the behavior and effects of competitive behavior. (See Research Question #2) At least, comparative analysis can further refine the understanding of policymakers about the strategies of infant food companies

under various conditions of competition. This is relevant to policymakers in the four field sites and in other countries where similar competitive situations may exist.

Research Question #3: What is the intensity of current promotional activity by infant food sellers to mothers, health care workers, and other who influence infant feeding choices?

The development of the WHO Code and efforts to implement it in many nations, including Colombia, Thailand, Indonesia and Kenya, provides an important backdrop against which current promotional activities in the infant foods industry of each country should be examined. The Code provides a baseline of internationally acceptable commercial marketing behavior which, while not universally endorsed, is widely known by government and industry alike. Our principal hypothesis about current promotional activity is that it will tend to conform to the terms of the WHO Code.

Subsidiary to that general proposition are a number of hypotheses that could be tested in each field site. For example, the Code urges that there be no media advertising to the public and endorses promotion to health care professionals. Therefore, we can hypothesize that:

- No mass media advertising will occur for infant formula products;
- Infant foods which are not covered by the WHO Code will be advertised to the public as appropriate for infants;
- Promotion of infant formulas and foods will be focussed on health care professionals rather than consumers;
- Labelling of packages will conform to WHO Code provisions;
- Milk nurses will be removed;
- Sampling will be pursued as fully as possible under the code's terms;
- Educational information and materials will be distributed as widely and freely as possible under terms of the code;

-- Gifts to health care professional will continue in ways consistent with Code's terms.

Each of these hypotheses about industry behavior bears a relationship to factors we have elsewhere hypothesized to influence infant feeding decisions by mothers, e.g., personal contacts with health professionals, "messages" via advertising, labels, booklets, and product samples.

Recent information from various field sites suggests that the multinational infant food companies are responding faster to WHO Code provisions than local companies. Interviews with company executives and retailers should help to clarify whether or not this is true, and if so, why. This appears important enough to set forth as a hypothesis.

There will appear differences in the behavior of multinational sellers and local firms along key dimensions of the WHO Code's provisions of competitive practices.

Finally, the code-orientation toward health professional guidance in the use of breastmilk substitutes suggests that sellers will begin to promote the health and medical qualities of such products rather than the food qualities. Therefore, we hypothesize that:

Promotional activities of sellers will tend to emphasize the health and medical qualities of the products, rather than the food qualities.

Research Question #4: What effects, if any, do the marketing practices and policies of infant food sellers have on infant feeding behavior of mothers?

Because of the changes induced by the WHO Code, three specific areas of commercial practice will be the initial focus of this research. They are: product pricing, the receipt of product samples, and the recommendation of health professionals (e.g., physicians, nurses, others).

Product Pricing

Preliminary ethnographic information suggests that a significant portion of mothers in each country will not perceive crucial distinctions between infant formula and other milk products which are frequently bottle fed to babies. This view was well expressed in comments by mothers in Colombia as "milk is milk." Such comments suggest that the demand for products that can be bottled to infants is relatively inelastic, but that within that group of foods (breastmilk substitutes) the demand for any one product (or brand) is relatively elastic. That is, consumers will switch among products and among brands on the basis of price. If the formula sellers have been effective in communicating the message that formula is the best breastmilk substitute, however, there should be less elastic demand for formula than for the other breastmilk substitutes. In other words, mothers who believe formula is not like milk, and is the best breastmilk substitute, will be less inclined to switch to inexpensive substitutes.

Using data from the consumer behavior section of the infant feeding practices survey, the following table can be constructed to identify how many mothers in the sample believe product price to be a key factor and to what extent this corresponds to their opinion about the relative merits of formula and milk. It is to be expected that cells A and D would have the largest number of respondents.

Consumer Opinion

		Milk Is As Good As Formula	Milk Is Not As Good As Formula	N=
<u>Consumer Opinion About The Importance Of Price</u>	Very Important	A	B	
	Not Important	C	D	

N=

Following this cross tabulation, we would analyze the actual use of formula against the responses in the previous table. This will provide basic information about

Use of Formula

<u>Opinions</u>	Yes	No
A		
B		
C		
D		

the extent to which consumer opinions about the price and quality of formula as a food for infants corresponds to patterns of actual usage.

Similar tables can be constructed to organize data for other products (jarred foods, cereals, or breastmilk). In conjunction with other data, this information will help clarify whether, and to what extent, purchase and usage behavior conforms to consumer opinions about the factors that influence feeding choices.

Influence of Samples

With the general decline in mass media advertising for infant formula products, it is believed that product sampling has become the most important commercial method of consumer promotion. Placing the product in the hands of the mother virtually guarantees that it will be used, and if the baby responds favorably, that the mother will continue to use that brand in the future. Thus, our hypothesis is that mothers who received product samples will less frequently breastfeed their infants. Further, mothers who can recall the brand of formula which they received are likely to indicate that brand as their preferred brand, and if it is available, to be using that brand.

Health Professional Recommendation

Elsewhere, we have hypothesized that breastfeeding behavior will be positively correlated with the recommendation of health professionals, including physicians, nurses and others. As the promotional strategies of sellers focus increasingly on health care professionals and institutions, and as the WHO Code sanctions such promotion, the importance of health care and professional recommendations can be expected to become a more important determinant of feeding behavior.

Thus,

		<u>Consumer Behavior</u>	
		Breastfeeding	Bottlefeeding
<u>Medical Recommendation</u>	Breastfeeding Recommendation	A	B
	Bottlefeeding Recommendation	C	D
	No Recommendation	E	F

Sampling and Medical Recommendation

Preliminary information suggests that the most powerful predictor of feeding behavior is the combination of medical endorsement and receipt of a product sample. Thus, we envision a cross tabulation of data in the following format:

		<u>Formula Samples</u>	
		Sample Received	No Sample
<u>Medical Recommendation</u>	Breastfeeding Recommendation	A	B
	Bottlefeeding Recommendation	C	D
	No Recommendation	E	F

The hypothesis is that a medical recommendation of breastfeeding, supported by no sample, has a highest probability of resulting in breastfeeding behavior. A medical recommendation of bottlefeeding, plus a sample of formula, has a highest probability of resulting in bottlefeeding. Where no recommendation is made, the probability of bottlefeeding is higher where a sample was received.

Consumer Behavior

<u>Exposure to Medical Recommendations/ Free Samples</u>	<u>Consumer Behavior</u>		n =
	Breastfeeding	Bottlefeeding	
A			
B			
C			
D			
E			
F			
n =			

(From previous table)

Research Question #5: What effects, if any, do marketing practices have on the attitudes and behavior of health care providers?

In each country, there is a special study being undertaken of the medical infrastructure. The purpose of this analysis is to better ascertain the attitudes and actions of health care professionals on infant feeding. The general assumption is that the recommendations of health care professionals, including physicians, nurses and midwives, are instrumental in shaping maternal decisions to breastfeed and use/purchase commercial infant foods. Preliminary ethnographic information from each country has endorsed the general validity of this assumption.

The W.H.O. Code has prescribed a number of appropriate ways in which marketers of breastmilk substitutes can contact health care professionals and institutions. Generally, the companies are permitted to provide information to health care professionals without restriction, and to provide a limited number of product samples for professional inspection, but not for widespread distribution. The precise meaning for the "samples/supplies" terminology in the Code has been a matter of major dispute between the companies and their critics.

Preliminary information suggests that the commercial sellers of breastmilk substitutes are approaching health care professionals with three basic messages: (1) infant formula products are of high quality and nutritionally satisfactory for babies; (2) although breastfeeding is the best means of feeding the infant, formula feeding is the best alternative for the mother who is unable to breastfeed for medical reasons (e.g., insufficient milk) or chooses not to breastfeed for other reasons (e.g., employment); (3) that formula products are the best supplements for the baby who is not exclusively breastfed. The medical interviews should attempt to determine the extent to which each of these messages is actually

heard by health professionals, is believed by them, and becomes a view that they express to mothers with whom they have professional contact. Conceptually, we want to be able to use the following table if possible:

	Heard (recall)	Believed (opinion/ attitude)	Communicated to Mothers (recall) -
Message ...			
#1 "High Quality"			
#2 "Best Alternative to Breastmilk"			
#3 "Best Supplement"			

N =

We can hypothesize that the highest recall would be for messages #1 and #2. Further, we can hypothesize that message #2 would rank highest on the Belief dimension, and be the message most likely communicated to mothers.

There are reports of gift-giving by the commercial firms to health professionals and institutions. We can hypothesize that the acceptance of such gifts by health care institutions (clinics, hospitals) will be associated with the distribution of samples to mothers at those institutions. Where there are two clinics or hospitals, one of which gives samples and the other does not, a "natural experiment" may exist for studying the attitudes of health workers and the infant feeding behaviors of mothers who use those clinics or hospitals.

Careful description of both commercial marketing practices and practices in the health care institutions will permit more focused analysis. Contemporary theory holds that health professionals are the entry point for commercial marketers into the health care delivery system, and that these individuals both "filter" and "distribute" information. Our objective is to identify the patterns of information receipt and distribution, and to assess what marketing factors, if any, affect those patterns.

The Population CouncilCONTRACT No. AID/DSAN-C-0211PIO/T No. 3698404STATEMENT OF EXPENDITURES AT MARCH 31, 1982

	Budget 9/30/79 <u>12/31/82</u>	Expended To Date <u>3/31/82</u>	Expended This Period <u>1/1/82-3/31/82</u>
Salaries	\$ 211,046.00	\$ 165,251.96	\$ 19,257.24
Fringe Benefits	52,230.00	38,869.70	4,718.00
Travel and Transportation	42,393.00	53,001.97 (2)	137.07
Allowances	24,820.00	- (2)	-
Other Direct Cost	42,403.00	6,447.81	355.62
Materials and Supplies	4,978.00	1,806.69	106.31
Subcontracts	828,659.00	523,302.32 (3)	114,246.53 (3)
<u>Sub-Total</u>	<u>1,206,529.00</u>	<u>788,680.45</u>	<u>138,820.77</u>
Indirect Cost: This Period:			
(Direct Cost (No Consultant Fees) \$138,820.77			
Program Management @ 19% = 26,375.95	113,414.00	146,075.33	26,375.95
<u>Sub-Total</u> 165,196.72			
Management and Support Services @ 12% = 19,823.60	131,994.00	112,191.72	19,823.60
<u>Total Indirect Cost</u>	<u>245,408.00</u>	<u>258,267.05</u>	<u>46,199.55</u>
<u>Sub-Total</u>	<u>1,451,937.00</u>	<u>1,046,947.50</u>	<u>185,020.32</u>
Consultants	32,600.00	19,868.00	-
<u>TOTAL EXPENDITURES</u>	<u>\$1,484,537.00 (1)</u>	<u>\$1,066,815.50</u>	<u>\$185,020.32</u>

(1) Funds fully obligated 3/16/82.

(2) Travel expenses (Short term per diem) are included under (Field) Allowances in the cost proposal and contract. To avoid misleading reporting and unnecessary splitting of travel expenses between two budget lines, (Travel and Transportation and Allowances) all Air travel, Transportation and related expenses are included under Travel and Transportation.

Cont'd on next page

The Population Council

Fiscal Report No. 10

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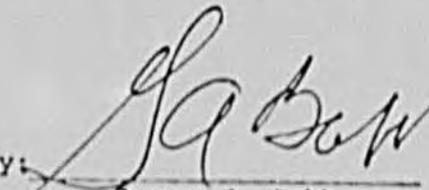
CONTRACT No. AID/DSAN-C-0211
PIO/T No. 3698404

STATEMENT OF EXPENDITURES AT MARCH 31, 1981

(3) Summary of Commitments and Payments

	Award/Contract		Amount Paid At 3/31/82
	Estimated Cost	Awarded at 3/31/82 Amount Obligated	
CI80.16A & CI81.60A	\$157,308.00	\$157,308.00	\$114,594.00
CI80.17A & CI81.37A	171,351.00	111,089.00	90,257.33
CI80.43A	160,000.00	160,000.00	143,449.38
CI81.4A	85,781.00	85,781.00	64,122.18
CI81.24A	51,854.00	51,854.00	41,484.08
CI81.25A	59,524.00	59,524.00	26,665.82
CI81.28A	43,670.00	43,670.00	36,946.00
CI81.29A	10,276.00	10,276.00	5,783.53
<u>Total</u>	<u>\$739,764.00</u>	<u>\$679,502.00</u>	<u>\$523,302.32</u>

The undersigned hereby certifies: (A) That payment of the sum claimed under the cited contract is proper and due and that appropriate refund to AID will be made promptly upon request in the event of disallowance of costs not reimbursable under the terms of the contract, (B) That information on the fiscal report is correct and such detailed supporting information as AID may reasonably require will be furnished promptly to AID on request at the Contractor's home office or base office as appropriate and (C) That all requirements called for by the contract to the date of this certification have been met.

By: 
George A. Babb

Title: Assistant Treasurer and Comptroller

Date: June 29, 1982