

**Iowa's Implementation
of
The WIC National Breastfeeding Promotion Project**



Project Report and Summary of Findings

May 2002

**Holly Szcodronski, R.D., L.D.
WIC Breastfeeding Promotion Coordinator
Iowa Department of Public Health**

**Brenda Dobson, M.S., R.D., L.D.
WIC Nutrition Services Coordinator
Iowa Department of Public Health**

**Mary E. Losch, Ph.D.
Center for Social & Behavioral Research
Department of Psychology
University of Northern Iowa**

**Carol Bryant, Ph.D.
College of Public Health
University of South Florida**

Table of Contents

	<u>Pages</u>
List of Tables and Figures	iii
Acknowledgements	v
Overview.....	1
Project Background.....	1
Phase I.....	1
Phase II.....	1
Phase III.....	2
Phase IV.....	2
Phase V.....	2
Project Funding.....	2
Breastfeeding Activities.....	3
State Breastfeeding Task Force.....	3
Annual Breastfeeding Conference.....	3
Local Breastfeeding Coalitions.....	3
Breastfeeding Peer Counselor Train-the-Trainer Conference.....	4
3-Step Counseling.....	4
Breastfeeding Objectives.....	4
Preparation for Campaign.....	5
WIC National Breastfeeding Promotion Project Conference.....	5
Informational Meetings.....	5
Local Staff Training.....	5
Getting Ready for 800 Number Calls.....	5
Mailings.....	6
Newsletters.....	6
Implementing the Campaign.....	6
Evaluations.....	7
Media Campaign Assessment.....	7
Calls to the State WIC Program in 1997-1998.....	7
Media Campaign.....	9
1997 Media Campaign.....	9
1998 Media Campaign.....	10
2000 Media Campaign.....	12
Summary of Campaign Evaluation Research Findings.....	13
Pretest Posttest Evaluation.....	13
Methodology.....	13
Demographic Profile.....	14
Quantitative Survey Results.....	16
Breastfeeding Rates.....	16
Campaign Awareness.....	18
Breastfeeding Attitudes.....	21
Survey Conclusions.....	23

Table of Contents continued.

	<u>Pages</u>
Qualitative Findings.....	25
1997-1998 Caller Data.....	25
General Conclusion.....	29
Campaign Evaluation.....	29
Additional Indicators	29
Related Activities.....	29
Limitations	30
Summary	30
References.....	31
Appendix A.....	33
Appendix B.....	53

List of Tables

<u>Table</u>	<u>Page</u>
1 Tools and Intended Use of Survey Information.....	6
2 Comparison of Iowa WIC Population and Survey Samples.....	14
3 Did You Breastfeed Your Most Recent Child?	16
4 Breastfeeding at Hospital Discharge.....	16
5 How Old When Introduced Formula?.....	17
6 How Old When Stopped Breastfeeding Youngest Child?	17
7 Comparison of Baseline and Post-Campaign Awareness Results	19
8 Comparison of Baseline and Post Encouragement Sources	20
9 Comparison of Baseline and Post-Campaign Breastfeeding Attitudes.....	21
10 Open-Ended Responses to Breastfeeding Makes Me Feel?	22
11 Open-Ended Responses for Because?.....	23
12 Where Did You Get This 800 Number to Call About Breastfeeding?	26
13 What Was the Message in the Ad You Saw or Heard?	26
14 Are You on WIC?	26
15 Are You Pregnant?.....	26
16 What Race or Ethnic Group Do You Identify With?.....	27
17 What County Do You Live In?.....	27
18 How Old Are You?	28
19 Reason for Call	28

List of Figures

<u>Figure</u>	<u>Page</u>
1 1997 Media Markets	9
2 1998 Media Markets	10
3 Newspaper PSA Content	11
4 Reasons for Stopping Breastfeeding.....	18
5 I Have Someone I Can Go to for Advice About Breastfeeding.....	20

Acknowledgements

Successful implementation and evaluation of a social marketing campaign such as the WIC National Breastfeeding Promotion Project requires commitment, creativity, and time. The activities reported in this document would not have been possible without the energy, effort, and resources contributed by these people:

- Jewell Chapman contributed hours of transcribing responses to the open-ended questions on the two surveys, stuffing and opening thousands of envelopes, printing numerous copies of materials used throughout the project, and preparing materials for numerous presentations.
- Lloyd Burnside monitored the survey distribution process, tracked returned surveys, and prepared follow-up mailings.
- Jim Lindenberger with Best Start Social Marketing provided the creative energy to develop the project, its messages and media channels; contributed cash awards for the sweepstakes for returned surveys; supported and guided us through the development of the questionnaires; assisted in the initial project evaluation; and answered many questions and telephone calls before, during and after the project.
- USDA, Mountain Plains Regional Office provided critical additional funding during several years of stable program funding to support implementation of the project in 1998 and 2000 and funded the final project evaluation and production of this report.
- Susan Frommelt and Chad Leever, working with the University of Northern Iowa Center for Social and Behavioral Research, provided extensive assistance with the document editing and data coding, respectively.
- Local and state agency Iowa WIC staff embraced the project and the materials, giving life to the campaign and revitalizing breastfeeding promotion and support activities across the state in countless ways. Special thanks is extended to the two local agencies that were pilot agencies for data collection and message testing — Siouxland WIC and Operation Threshold — and to the local agency members of the state steering committee — Marlene Jepsen, Sandra Sauer, and Kristin Shields.
- WIC mothers and families shared their breastfeeding successes and difficulties with us through their survey responses, teaching us that breastfeeding matters a great deal to families and deepening our commitment to promote, protect, and support breastfeeding.

Thank you for your support and dedication to making breastfeeding the norm in Iowa.

Overview

Project Background

Iowa was one of ten pilot states and Indian Tribal Organizations (Arkansas, California, Chickasaw Nation of Oklahoma, Iowa, Mississippi, Nevada, New Jersey, New York, Ohio, and West Virginia) selected to participate in the WIC National Breastfeeding Promotion Project. Best Start Social Marketing and the Food and Consumer Service (FCS) of United States Department of Agriculture (USDA) entered into a cooperative agreement in 1995 to develop and implement the project. The WIC National Breastfeeding Promotion Project is also referred to as *Loving Support Makes Breastfeeding Work* throughout this report. The goals of the project were to increase breastfeeding initiation and duration rates among WIC participants, increase referrals to WIC for breastfeeding support, and increase general public acceptance and support of breastfeeding (Lindenberger & Bryant, 2000). Leading up to the launch of this national campaign, the project revolved around five phases which occurred in the following sequence:

Phase I: *Conducted consumer research to identify breastfeeding attitudes, trends, and needs*

In addition to selecting states, Best Start and FCS chose two agencies in each pilot state to conduct interviews with WIC participants, family members, and health care providers on their attitudes and perceptions of breastfeeding. Focus groups and face-to-face interviews were conducted in five states (California, Chickasaw Nation of Oklahoma, Mississippi, New York, and Ohio) with pregnant women, breastfeeding women who stopped before they intended to, and WIC staff. The remaining five states (Arkansas, Iowa, Nevada, New Jersey, and West Virginia) were involved in telephone interviews with women who were on the WIC Program, their partners and health care providers and state WIC Breastfeeding Promotion Coordinators. In Iowa, the two agencies selected for the project were Siouxland WIC in Sioux City and Operation Threshold in Waterloo.

Phase II: *Compiled research report*

Data collected from the ten pilot states during the focus groups and interviews were compiled into a research report that became the basis for the campaign. The report included a summary of:

- Women's knowledge and perceptions of breastfeeding and contraindications;
- Factors that motivate women to breastfeed;
- Factors that deter women from breastfeeding;
- Family members' perceptions of breastfeeding benefits and contraindications;
- Factors that motivate WIC personnel to promote breastfeeding; and
- Factors that deter WIC personnel from promoting breastfeeding.

Project research identified several barriers to breastfeeding. Materials and messages were based on three of these. The three barriers chosen were:

- Embarrassment;
- Competing demands on mother's time; and
- The need for social support.

Phase III: *Developed campaign material*

The campaign materials included educational pamphlets, posters, television and radio advertisements, and outdoor billboards. Additional materials were developed for staff that included a breastfeeding promotion guide, a breastfeeding resource guide, and a motivational/orientation booklet.

Phase IV: *Held a training conference*

In April of 1997, a national training conference was held in Alexandria, Virginia for the pilot states and any other states that were interested. The conference helped prepare states, which were encouraged to send a team of people, to launch the project on August 1, 1997.

Phase V: *Provided technical assistance*

Best Start provided technical assistance to pilot states for 18 months following the campaign's implementation. Technical assistance consisted of a trip to each pilot state and continuous phone contact.

Project Funding

Pilot states received no funding to implement or maintain the project. In Iowa, funds to purchase print materials came from the Iowa WIC program general budget. The media campaign in 1997 was also funded through the Iowa WIC program general budget and the media campaign in 1998 and newspaper campaign in 2000 were funded through Infrastructure Grants from the USDA Mountain Plains Regional Office.

Breastfeeding Activities

Iowa had been involved with various breastfeeding activities prior to the implementation of the campaign. These activities included:

State Breastfeeding Task Force

The Iowa Lactation Task Force was formed in 1986 as a statewide organization with representatives from both private and public health sectors who promote and support breastfeeding. The task force meets three times a year, one of which is via video-teleconference. The Task Force in 1986 conducted a survey to collect information on infant feeding practices and policies in Iowa hospitals. This survey, called The Hospital Breastfeeding Survey, was repeated in 1992 and 2001 to see if practices had changed. The Iowa Mother's Survey was conducted in 1993 to determine baseline data for Iowa regarding breastfeeding duration, barriers, and attitudes. Ongoing Iowa Lactation Task Force activities include producing the *Quality Times* newsletter and keeping various materials produced by the Task Force up to date. In 1998, *Breastfeeding In the 1st Week: A Counseling Guide for Health Care Professionals*, was developed to ensure that woman receive consistent messages when initiating breastfeeding. In 2001, the Iowa WIC Program, in conjunction with the Iowa Lactation Task Force, reformatted and updated the *Breastfeeding Promotion and Support Guidelines for Healthy Full Term Infants*.

Annual Breastfeeding Conference

Since 1990, Iowa has held an annual breastfeeding conference. The conference is co-sponsored by the Iowa WIC Program and two local hospitals (Iowa Methodist Medical Center and Iowa Lutheran Hospital). The conference draws an average of 350 participants from seven states. For half of these participants, it is their first attendance at a breastfeeding conference. Displays at the conference include WIC, Iowa Lactation Task Force, local breastfeeding coalitions, and breast pump companies.

Recent keynote speakers have included Dr. Marianne Neifert, pediatrician and author of *Dr. Mom's Guide to Breastfeeding*; Kathleen Auerbach, co-author of *Breastfeeding and Human Lactation*; Kiran Saluja, Deputy Director of Nutrition Education and Breastfeeding Promotion, Public Health Foundation WIC Program; Carol Bryant, Marketing Research Director, Best Start Social Marketing; Dr. Jack Newman, pediatrician and co-author of *The Ultimate Breastfeeding Book of Answers*; Dr. Thomas Hale, professor of pharmacology at Texas Tech School of Medicine and author of *Medications and Mothers' Milk*; Marsha Walker, National Alliance for Breastfeeding Advocacy; and Molly Pessl, Evergreen Hospital.

Local Breastfeeding Coalitions

The Iowa WIC Program received special project funding from the Maternal and Child Health Bureau of the United States Department of Health and Human Services for three years beginning October 1992. Two goals of the project, Building and Strengthening Iowa's Community Support (BASICS) for Breastfeeding, were to support the development of four community based

breastfeeding coalitions and to develop a coalition-building manual. Iowa's Breastfeeding Coalitions increased from three local breastfeeding coalitions to sixteen during the grant period. The manual, *Community Based Coalition Building for Breastfeeding Promotion*, was developed as part of the project and was printed by USDA and sent to all state and local WIC agencies.

Currently, Iowa has 20 local breastfeeding coalitions scattered throughout the state. Once a year, the local coalitions come together for an afternoon of networking following the spring Iowa Lactation Task Force meeting. The networking and state task force meeting occur the day before the annual breastfeeding conference and at the same location.

Breastfeeding Peer Counselor Train-the-Trainer Conference

Twenty-six local agency staff, of whom about one-third were the Breastfeeding Coordinators, attended a train-the-trainer conference on July 28-30, 1997 in Des Moines. The manual used for the training was the *WIC Breastfeeding Peer Counselor Training Program* developed by the Mountain Plains WIC State Agencies in cooperation with USDA Mountain Plains Regional Office. The training included: 1) the eight lessons outlined in the manual, 2) national perspectives on breastfeeding, 3) administrative topics, 4) liability issues, and 5) a celebration of the new peer counselors. Currently, local WIC agencies are in various stages of implementing peer counselor programs.

3-Step Counseling

Local WIC agency staff including dietitians, nurses, breastfeeding coordinators and support staff attended training on breastfeeding counseling techniques. The training was offered on March 13 and September 17, 1998. A total of 105 staff attended. The training was done via video-conference with the trainers at the transmitting site and state nutrition consultants facilitating the satellite sites.

The program used *Best Start's 3-Step Counseling Strategy* as the basis for the training. All WIC agencies received a copy. In conjunction with the training a one-page reference, *3-Step Counseling Desk Reference*, and a bookmark listing the three steps were developed. Refresher training has occurred several times since the 1998 training events.

Breastfeeding Objectives

The grant applications submitted by local WIC agencies each year must contain at least one breastfeeding promotion and support action plan. Samples of action plans include: initiating peer counselor programs, developing and using a postpartum telephone survey, developing and revising breastfeeding resources, implementing electric breast pump loan programs, conducting inservices for health professionals, and starting local breastfeeding coalitions.

Preparation for Campaign

Iowa prepared for the launch of the campaign in various ways.

WIC National Breastfeeding Promotion Project Conference

Iowa sent a team of five (three local agency staff members and two state staff members) to the national training conference sponsored by Best Start and held in Alexandria, Virginia in April 1997. The conference prepared WIC staff to begin implementing the WIC National Breastfeeding Promotion Project. Conference topics included building coalitions, working with the media, managing peer counselor programs, assuring physician involvement, developing strategies to use in WIC clinics, and counseling techniques. Time was allotted during the conference for each state to begin formulating strategies on how the project would be implemented and what activities needed to take place prior to the launch of the media campaign.

Informational Meetings

Getting the word out on the project was the main focus after returning from the training conference in Virginia. Contacts were made within the Iowa Department of Public Health (IDPH) as well as groups outside the department. Within the department, presentations were made to the Director and his staff, at several bureau staff meetings, and to new public health nurses.

Outside the IDPH, presentations were made at the Iowa Lactation Task Force Meeting, Networking For Iowa Breastfeeding Coalitions Meeting, Child and Adult Care Food Program Meeting, and the Breastfeeding Peer Counselor Train-the-Trainer Conference.

Local Staff Training

The training that took place in Iowa for the project occurred over the Iowa Communication Network (video teleconference) on July 1, 1997. Local WIC staff, public health nurses, and members of local breastfeeding coalitions participated. The purpose of the training was for participants to become familiar with the goals and design of the project. In addition, the educational brochures and media component of the project were viewed. Site facilitators included local and state WIC agency staff who had attended a train-the-trainer event earlier in the summer.

The Iowa WIC program sent all local agencies print materials developed for the campaign. The materials included posters, pamphlets, and Staff Support Kits.

Getting Ready for 800 Number Calls

The Iowa WIC 800 number appeared as a tag on all TV, radio, and outdoor advertisements for the campaign. In anticipation of calls that might be received in response to these messages, several tools were developed. The following table shows the tools that were developed and their intended use.

Table 1: Tools and Intended Use of Survey Information

Tool	Intended Use
How to Handle Telephone Calls About Breastfeeding*	Guide for state staff to use when calls were received.
Demographic Characteristics of Callers*	Obtain demographic information from callers prior to being connected to a state nutrition consultant.
Log of Calls In Response to the Loving Support Project*	For state nutrition consultants to log in information about the nature of the call, what materials were sent, and what referrals were made, if any.
WIC National Breastfeeding Promotion Project- Summary	Summary of the project to send out to health care professionals who called in wanting to know more about the project and available breastfeeding resources in Iowa.

*Sample tools can be found in Appendix B.

Mailings

The project summary was mailed to various groups and individuals in Iowa. The summary went to:

- Iowa Chapter of the American Academy of Pediatrics Breastfeeding Coordinators,
- Infant Mortality Prevention Project Coordinators,
- La Leche League leaders,
- International Board Certified Lactation Consultants,
- Iowa State University Extension nutrition and health field specialists,
- Maternal Child Health Advisory Council, and
- Local breastfeeding coalitions.

Newsletters

An article about the project was submitted to various Iowa organizations to be included in their summer or fall 1997 newsletter. Organizations that published an article were:

- Iowa Dietetic Association,
- Child and Adult Care Food Program,
- Maternal and Child Health Program, and
- Iowa Chapter of the American Academy of Pediatrics.

Implementing the Campaign

The project kicked off August 1, 1997 in Iowa as well as nationwide. The kick-off included the use of print material and media ads. Three media markets were targeted for 8 weeks in 1997 for

television and billboard ads. The campaign in 1998 also included three media markets for radio, television, and billboard ads. Radio ads ran for 2 weeks, television ads ran over a 3-6 week period and billboards were posted for 4 weeks. A small number of newspapers ran public service announcements (PSAs) during this time as well.

During 2000, an Infrastructure Grant from the USDA Mountain Plains Office made it possible for a paid advertisement to be placed in the 38 daily and 228 weekly newspapers across the state during World Breastfeeding Week (August 1-7).

Evaluation

Media Campaign Assessment

The media campaign was assessed using a pre/post design in which a sample of mothers was sent a questionnaire prior to the beginning of the media campaign and another group was sampled after the 1998 media campaign. Topics assessed included breastfeeding initiation and duration rates, reasons for weaning, exposure to information about breastfeeding from media channels used in the campaign, perceived social support (e.g., from WIC, health providers, baby's father, friends), attitudes and knowledge about breastfeeding, attitudes toward breastfeeding, infant feeding experiences, and demographic information. A summary of the key findings of the study is presented later in this report.

Calls to the State WIC Program in 1997-1998

The Iowa WIC 800 number appeared on the television and billboards ads and generated a total of 105 calls received by the State WIC Office from August 1-October 2, 1997 in response to the media campaigns. The state WIC office 800 number was also used on the radio, television, and billboard advertisements for the 1998 media campaign. A total of 34 callers used the toll free number from March 16-April 24, 1998 in response to the ads. A summary of the call results is presented later in the report.

**THIS PAGE
INTENTIONNALLY LEFT
BLANK**

Media Campaign

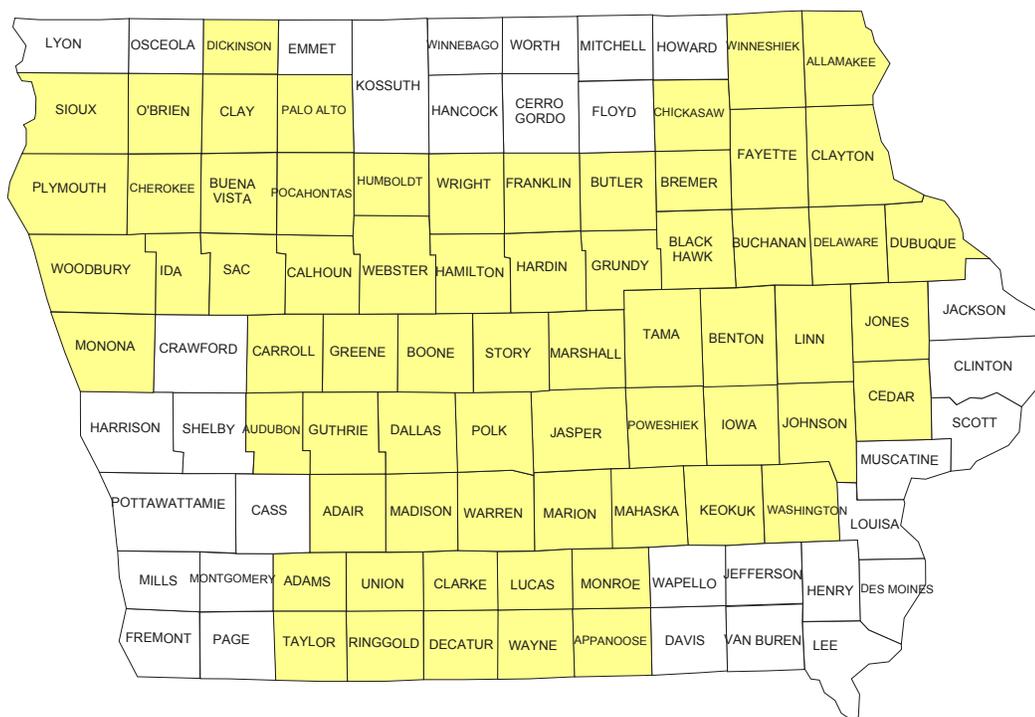
Both the national and the Iowa media campaigns began on August 1, 1997. The campaign consisted of print material and media ads. In 1998, Iowa launched another media campaign. All media markets with locations in Iowa were targeted. Counties not covered in the campaign fell in bordering states' media markets.

1997 Media Campaign

The three media markets targeted in 1997 for television and billboard ads were Des Moines, Sioux City, and Waterloo-Cedar Rapids (see Figure 1). These markets, which comprise counties serving 70% of the WIC caseload, were chosen for specific reasons. The Des Moines market was selected for its population density. Both the Sioux City and Waterloo markets were chosen because these were the service areas in which the WIC agencies were involved in research for the project and testing of educational materials.

Television ads ran for 8 weeks (August 1 - September 26) with 844 spots total or about 100 per week. The outdoor billboards, 64 total, were up for 4 weeks (Waterloo and Des Moines markets ran in August, Sioux City and Cedar Rapids markets ran till mid September). The media budget for 1997 was \$84,598.

Figure 1: 1997 Media Markets



1998 Media Campaign

The campaign in 1998 focused on Des Moines, Council Bluffs, and Davenport for radio, television, and billboard ads (see Figure 2). Des Moines was again chosen for its population density. The Council Bluffs/Omaha and Davenport markets were chosen because they included the largest remaining cities not part of the 1997 campaign. Counties covered in 1998 served about 53% of the WIC caseload (see Figure 2).

Radio ads ran for 2 weeks (March 16 – 29) for a total of 212 spots. A total of 349 television ads were aired over a 3 to 6 week period (March 16 – April 26) depending on the media market. Billboards were displayed for 4 weeks (late March to late April) with 38 boards in use. The media budget for 1998 was \$90,000.

Newspaper public service announcements (requiring no payment for publication), developed by Best Start Social Marketing, were sent to all the weekly and daily papers in the state for publication during World Breastfeeding Week in August, 1998. However, fewer than 20 of the PSAs were used due to newspapers' dwindling PSA budgets. A copy of the newspaper PSA is presented in Figure 3.

Figure 2: 1998 Media Markets

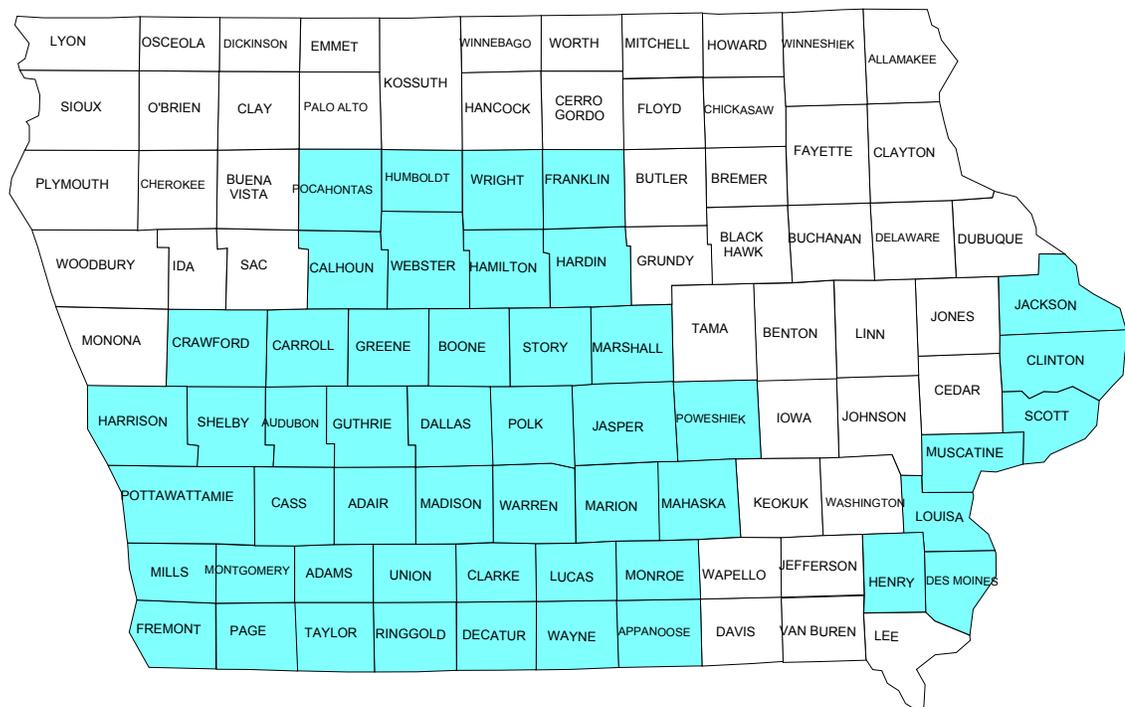


Figure 3: Newspaper PSA Content



**Give a breastfeeding mom
your loving support.**

How do you keep a family close? Try breastfeeding. Besides giving your baby the perfect food, breastfeeding protects against illnesses and allergies, and creates a special bond that can bring your whole family closer together. It can also help you bounce back faster from pregnancy. And it's a lot easier than you might think. No matter what your age, what kind of food you eat, what your schedule or how relaxed you feel in the beginning, you can do it. With a little loving support.

loving ♥ *support*
makes breastfeeding work

For Information, call WIC
1-800-532-1579

Funded by United States Department of Agriculture, Food and Consumer Services. Developed by BEST START. For All The Right Reasons.

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (800) 245-6140. To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7137 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

2000 Media Campaign

An Infrastructure Grant from the USDA Mountain Plains Regional Office made it possible for a paid advertisement to be placed in the 38 daily and 228 weekly newspapers in Iowa during World Breastfeeding Week (August 1-7). The advertisement used was the same one distributed in 1998 by Best Start Social Marketing for placement of public service announcements. The ad generated a limited number of breastfeeding calls during World Breastfeeding Week but calls trickled in for months afterwards from women who saved the ad.

Summary of Campaign Evaluation Research Findings

Pretest Posttest Evaluation

To assess the *Loving Support Makes Breastfeeding Work* project's impact on WIC participants' breastfeeding rates, perceived social support, and exposure to media messages, a questionnaire was mailed to a random sample of women enrolled in the program. The baseline survey was conducted in July 1997, immediately prior to the media campaign's launch in August. The post-campaign survey was mailed in December 1998, shortly after the media campaign aired for a second time.

Methodology

The baseline survey was mailed to a random sample of 1,000 postpartum breastfeeding women and 1,000 postpartum non-breastfeeding women enrolled in the Iowa WIC program in July 1997. The 1998 post-campaign survey utilized a separate sample frame of 1,000 breastfeeding and 1,000 non-breastfeeding WIC participants. The 1998 questionnaires were mailed in December 1998. In both administrations, respondents received a questionnaire, cover letter, sweepstakes postcard and a business reply envelope for return of the questionnaire. One week later, a reminder letter was sent and three weeks after the initial mailing, a second mailing of the questionnaire was sent to those not responding to the first mailing. Potential respondents were provided an opportunity to have their names chosen in a cash sweepstakes if they returned an enclosed postcard for this purpose (cash prizes were \$100, \$75, \$50, and \$25). Slightly more than half (56%) of the mailed baseline surveys were returned. The return rate for the post-campaign survey was 62.9%. The survey examined:

- Breastfeeding initiation and duration rates;
- Reasons for weaning;
- Exposure to information about breastfeeding from media channels used in the campaign;
- Perceived social support (e.g., from WIC, health providers, baby's father, friends);
- Attitudes and knowledge about breastfeeding; and
- Demographic information.

In addition to the questions included on the baseline survey, several questions were added to the post-campaign survey to explore:

- Exposure to newspaper articles about breastfeeding, and
- A fill in the blank question (Breastfeeding makes me feel _____ because _____) that encouraged participants to share their feelings about breastfeeding.

Survey responses were entered using *SPSS* statistical software, using the double entry feature to identify and correct errors. After the data were checked and cleaned, frequency distributions, Chi-Square, and logistical regressions were performed using *SPSS*.

Demographic Profile

As shown in Table 2, of those who returned the baseline survey, approximately 81% were non-Hispanic White, 7% Hispanic, 4% were African American, 2% were Asian or Pacific Islander, 1% Native American, and the remainder identified themselves as “other” ethnic category. Thirty-one percent were unmarried, 61% were married, and 8% were separated, divorced, or widowed. With respect to formal education, 17% had not graduated from high school, 36% had a high school degree but no additional education, 31% had some vocational training or completed some college education, and 15% had graduated from college. The ages of respondents ranged from 14 years old to forty eight years old, with 12% under the age of twenty, 62% between twenty and twenty-nine years of age, and the remainder thirty years of age or older.

Table 2: Comparison of Iowa WIC Population and Survey Samples

	1997 WIC	1997 Baseline Survey	1998 WIC	1998 Post-Campaign Survey
Race				
White, non-Hispanic	82.8%	80.6%	83.1%	85.2%
Hispanic	8.0%	7.4%	8.4%	5.9%
Black, non-Hispanic	6.1%	4.3%	5.8%	4.1%
Asian or Pacific Islander	2.3%	1.9%	2.1%	1.8%
Native American	0.6%	1.3%	0.6%	0.5%
Other	N/A	4.3%	N/A	2.4%
Marital Status				
Not married	48.4%	30.6%	50.5%	31.1%
Married	51.6%	61.3%	49.5%	59.4%
Separated, divorced, widowed	N/A	8.1%	N/A	9.5%
Education				
<9 grade	1.6%	3.5%	4.8%	2.5%
9-11 grades completed	23.4%	13.9%	23.5%	12.9%
12 grades completed	59.5%	35.6%	43.8%	35.6%
Some college/vocational school	14.7%	31.5%	19.2%	35.4%
College graduate or more	0.8%	15.4%	4.7%	13.6%
Unknown	0.0%	N/A	4.0%	N/A
Age				
<16 years	5.0%	0.9%	1.7%	1.0%
16-19 years	23.9%	11.3%	22.8%	8.0%
20-29 years	42.9%	61.7%	59.9%	64.2%
30-39 years	19.4%	24.2%	14.9%	24.6%
40-49 years	4.7%	1.9%	0.8%	2.1%
50 and older	4.1%	0	0	0

Of those who returned the post-campaign survey, 85% were non-Hispanic White, 6% were Hispanic, 4% were African American, nearly 2% were Asian or Pacific Islander, less than a half percent were Native American and approximately 2% identified themselves as “other” ethnic category. Thirty-one percent had never been married while 59% were married, and 10% were separated, divorced or widowed. Fifteen percent of respondents had not completed high school, 36% had a high school degree but no additional education, 35% had some vocational training or completed some college education, and 14% had graduated from college. The ages of respondents ranged from 15 to forty eight years; 9% of respondents were under the age of twenty, 64% were between twenty and twenty-nine years of age, and the remainder were thirty years of age or older.

Overall, the samples closely approximated the Iowa population with regard to race/ethnicity. Consistent with breastfeeding populations, both samples were more likely than the broader population to be married, have higher levels of education, and to be older. The Iowa WIC population information is provided by the Centers for Disease Control and Prevention Pregnancy Nutrition Surveillance System (PNSS).

Quantitative Survey Results

This section summarizes results from a comparison of baseline and post-campaign survey responses. Of special interest were: 1) changes in breastfeeding rates; 2) recall of exposure to media messages about breastfeeding; 3) attitudes regarding breastfeeding, and 4) perceived support for breastfeeding from health providers, WIC employees, the babies' fathers and grandmothers, and WIC participants' friends.

Breastfeeding Rates

Breastfeeding initiation rates among survey respondents were 72% in 1997 and 74% in 1998 (see Table 3). These differences before and after the campaign approach but do not achieve statistical significance (X^2 2.79; df 1; p = .11).

Table 3: Did You Breastfeed Your Most Recent Child?

Percent yes pre-campaign: 71.9
Percent yes post-campaign: 74.4

Without a control group for comparison, it is not possible to attribute increases in breastfeeding rates to the *Loving Support Makes Breastfeeding Work* campaign, especially because breastfeeding initiation rates in Iowa have seen a gradual increase since 1990. Iowa breastfeeding initiation rates for the past 10 years are shown in Table 4.

Table 4: Breastfeeding at Hospital Discharge

Year	Rate – All Infants	Rate – WIC Infants
1990	50.2%	34.8%
1991	52.8%	41.5%
1992	55.9%	42.1%
1993	54.5%	44.1%
1994	57.9%	46.1%
1995	59.7%	47.9%
1996	57.8%	46.9%
1997	61.6%	50.9%
1998	64.4%	53.2%
1999	65.3%	54.7%
2000	67.2%	55.8%

(Mothers Survey, Ross Products Division, Abbott Laboratories: Iowa Data)

When respondents' demographic characteristics were included in a logistic regression model with their perceptions of social support and attitudes towards breastfeeding, women who had not completed high school were almost 4 times less likely to breastfeed than those who had a high school degree and/or additional formal education. No other demographic variables were significantly associated with breastfeeding initiation.

There were few differences in breastfeeding duration between the baseline and post-campaign (see Tables 5-6). Responses to the question: "How old was your child when you gave him/her infant formula for the first time"? were similar for both groups (see Table 5).

Table 5: How Old When Introduced Formula? (Among Those Who Breastfed)

Baby's Age	Baseline %	Post-Campaign %	Baseline Cumulative %	Post Cumulative %
1 week	19.4	23.3	19.4	23.3
2-4 weeks	23.4	23.1	42.8	46.4
5-8 weeks	20.4	18.8	63.2	65.3
9-12 weeks	9.6	8.1	72.8	73.4
13-16 weeks	7.1	7.5	79.9	81.0
17-20 weeks	4.5	4.4	84.4	85.4
21-24 weeks	5.0	3.2	89.5	88.6
25-28 weeks	3.9	4.2	93.4	92.9
29-36 weeks	3.1	5.1	96.4	98.0
Over 36 weeks	3.6	2.0	100.0	100.0

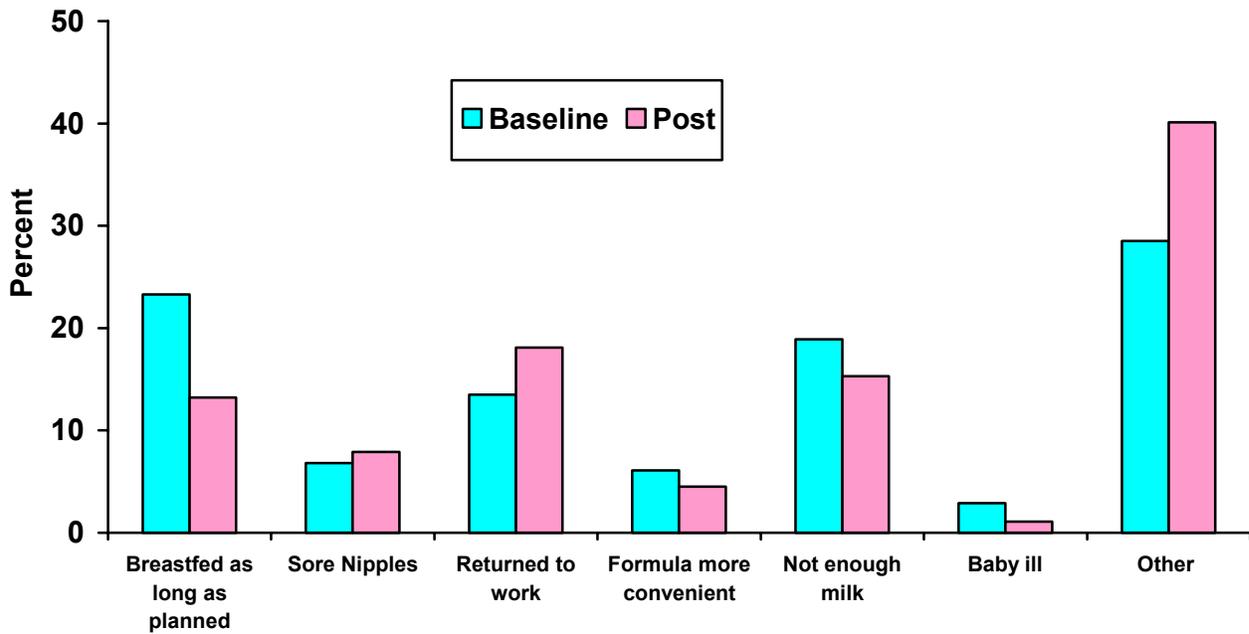
As shown in Table 6, infants' ages when weaned from breast milk were also similar before and after the campaign.

Table 6: How Old When Stopped Breastfeeding Youngest Child?

Baby's Age	Baseline %	Post-Campaign %	Baseline Cumulative %	Post Cumulative %
1 week	6.0	7.3	6.0	7.3
2-4 weeks	14.1	15.9	20.1	23.2
5-8 weeks	16.1	16.1	36.2	39.3
9-12 weeks	9.6	7.7	45.8	47.0
13-16 weeks	6.3	6.7	52.2	53.6
17-20 weeks	5.8	4.0	59.5	56.1
21-24 weeks	6.5	4.8	65.9	61.0
25-28 weeks	6.3	6.6	72.2	67.6
29-36 weeks	8.3	7.0	80.4	74.6
Over 36 weeks	19.6	25.4	100.0	100.0

As shown in Figure 4, mothers chose the category “other” most frequently when asked why they stopped breastfeeding. Additional typical responses were that they breastfed as long as they had planned, that they had returned to work, or that they did not have enough milk.

Figure 4: Reasons for Stopping Breastfeeding



Note: The Post-Campaign questionnaire included three more response choices (baby biting, mother sick, and baby weaned him/herself) based on the open-ended responses to the Baseline questionnaire. In this figure, these additional responses are included in the “other” category to be consistent with the reporting of the Baseline Survey.

Campaign Awareness

As shown in Table 7, significantly more women recalled seeing, hearing, and reading about breastfeeding after the *Loving Support Makes Breastfeeding Work* campaign than before.

Table 7: Comparison of Baseline and Post-Campaign Awareness Results

Media Exposure	Percent At Baseline	Percent Post-Campaign	Significance Levels (X ² , 1 df)
Saw breastfeeding information on television	51.5	63.6	p < .0001
Heard breastfeeding information on the radio	10.3	15.1	p < .0013
Saw breastfeeding information on a billboard	25.1	38.0	p < .0001
Read breastfeeding pamphlet	93.6	96.0	p < .0151
Read breastfeeding information in newspaper	Not asked*	15.6	Not Assessed*

*Note: Newspapers were not included in the 1997 media campaign and hence, were not asked about on the baseline questionnaire.

A comparison of women's perceptions of the encouragement they received to breastfeed before versus after the campaign reveals significant increases in perceived support.

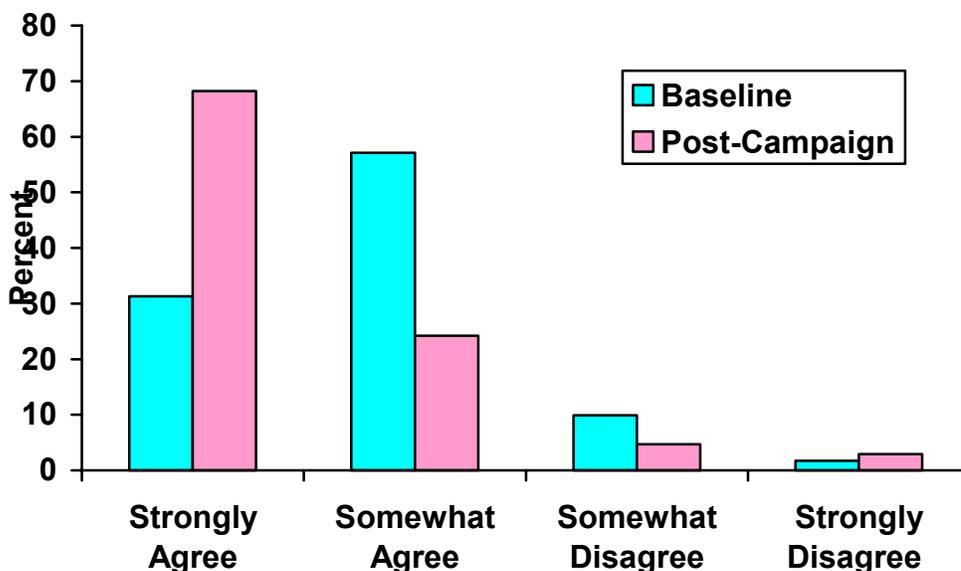
As shown in Table 8, after the campaign, 66% of WIC participants said their husbands or boyfriends encouraged them to breastfeed, compared to only 50% before the campaign was launched. Perceived support from their own mothers increased from 36% to 53% and reported encouragement from health providers increased from 63% to 84%. Almost all WIC participants (93%) recalled encouragement from WIC employees after the campaign compared to 74% before the campaign.

Table 8: Comparison of Baseline and Post Encouragement Sources

Encouraged to breastfeed by:	Percent At Baseline	Percent Post-Campaign	Significance Levels (X ² , 1 df)
Baby's father	49.7	65.7	p < .0001
Mother's mother	35.6	53.0	p < .0001
Friend or other relative	49.6	51.1	Not Significant
Prenatal care health professional	63.4	83.8	p < .0001
WIC employee	74.2	92.5	p < .0001

As shown in Figure 5, the proportion of women who reported they had someone to advise them about breastfeeding also increased dramatically after the campaign (X² 908.7; p < .0001). (Note: On the post survey, but not the baseline survey, women were given the option of selecting “No Opinion” in response to this and the other attitudinal questions. The women who selected this option were eliminated from the analyses. Although it is likely that the inclusion of the “No Opinion” response category on the post-campaign survey changed the total percentages, these differences would not be large enough to account for the highly significant differences in responses before and after the campaign.)

Figure 5: I Have Someone I Can Go to for Advice About Breastfeeding



Analyses of women’s responses on the Iowa post-campaign survey reveal that women who were encouraged to breastfeed by their husbands or boyfriends were 8 times more likely to initiate breastfeeding than those who lacked their partners’ support (Odds Ratio 8.19; $p < .0001$). Encouragement to breastfeed by the mothers’ mothers increased the likelihood of breastfeeding six-fold (Odds Ratio 5.79; $p < .0001$).

Breastfeeding Attitudes

Significant differences were also found in women’s attitudes and beliefs regarding breastfeeding and breastfeeding information before and after the campaign. After the campaign, women were more likely to strongly or somewhat agree with statements regarding breastfeeding’s benefits for mothers and babies. The percent of women who wished they had received additional information on breastfeeding also increased significantly.

Table 9: Comparison of Baseline and Post-Campaign Breastfeeding Attitudes (Percent Agree Somewhat or Strongly Agree)

Attitude Statement:	Percent At Baseline	Percent Post-Campaign	Significance Levels (X², 3 df)
Babies who are breastfed are healthier than babies who have been formula fed	73.9	83.5	Not Significant
Breastfeeding gives the mother a very special feeling	88.8	96.3	$p < .0001$
Breastfeeding can be very enjoyable for the mother	85.0	94.3	$p < .0001$
I wish I had been given more information about breastfeeding	28.9	55.9	$p < .0001$

Participants in the 1998 survey were also asked the following open-ended question:

Breastfeeding makes me feel _____ because _____.

Verbatim narrative responses were grouped by general theme or category and then coded with associated numbers for quantification. Responses with frequencies less than a half percent are grouped in a miscellaneous “Other” category. The coded responses for the two parts of the question are presented in Tables 10 and 11.

Table 10: Open-Ended Responses to Breastfeeding Makes Me Feel?

Response	Percent
Good / great / wonderful / good mother	40.9
Close to child / bonded / loved	15.4
Uncomfortable / awkward / sore	6.2
Special / proud	5.9
Other	5.2
No feeling / never breastfed	5.1
Useful / worthwhile / responsible / needed	4.9
Doing what's best / healthy / right thing	4.4
Important / made a difference / successful	4.2
Anxious / nervous	2.2
Relaxed / contented	2.0
Sad / bad / angry	1.2
Helpful to child	1.1
Disgusted / weird / gross	0.6
Tired	0.6

Table 11: Open-Ended Responses for Because?

Response	Percent
Provides a bonding experience	21.2
Healthy / boosts immunity	18.9
Other	17.4
Doing what's best / helping	14.8
Dependent on me / I do it all / no one else can do it	8.2
Good start in life	4.9
Natural	3.2
Don't enjoy it / uncomfortable / don't want to	2.5
Giving what's needed	2.1
Not enough milk / concerned about not enough milk	2.1
Too tied down / can't do in public	1.7
Hurts	1.7
Enjoy it	1.0
Easy / convenient	0.4

Survey Conclusions

The *Loving Support Makes Breastfeeding Work* campaign and other breastfeeding promotion activities appear to have had a significant impact on WIC participants' attitudes towards breastfeeding and the amount of support they report receiving from their relatives and health providers. In addition, the key campaign message appeared in open-ended, uncued responses provided in the post-campaign questionnaire where mothers cite "bonding opportunities" as the primary reason they felt positively about breastfeeding. Breastfeeding initiation and duration rates also increased slowly and steadily during the study period. Although it is not possible to attribute these increases to the WIC programs' promotional efforts without a "non-campaign" comparison site, the program's impact on important determinants of breastfeeding (i.e., attitudes and social support) strongly suggest that behavior would be positively impacted if the WIC program sustains its promotional efforts.

The importance of increased social support for breastfeeding is noteworthy because women who have support are significantly more likely to breastfeed than those who do not have encouragement from significant members of their social network (e.g., Woollett, 1987; Saunders & Carroll, 1988; McLorg & Bryant, 1989). These findings suggest that the *Loving Support*

Makes Breastfeeding Work program's strength in enhancing social support can be considered an intermediate measure of success, and if the campaign can be sustained, an important step in increasing breastfeeding rates in the future.

The lack of significant increases in breastfeeding rates is not surprising in light of the relatively short period of time that transpired between baseline and post-campaign measures. Many women potentially influenced by the campaign were either not yet pregnant or were still pregnant in December 1998, making it impossible to assess the program's impact on their infant feeding decisions and behavior.

Qualitative Findings of WIC 800 Number Use

1997-1998 Caller Data

A total of 103 calls were logged in on the Iowa WIC 800 number in 1997. Viewing the WIC 800 number on a television ad accounted for 75% of the calls. Each caller was asked several demographic characteristics and then connected with a state WIC nutrition consultant who made a note of all calls on a log sheet (see Appendix B). Most of the callers were not on WIC nor were they pregnant, indicating that the campaign message reached the general public – a goal of the campaign.

Approximately eight percent of the callers were less than 20 years old with the majority of callers being 20-35 years old. Several grandparents called requesting information for family members. WIC received calls from 35 of Iowa's 99 counties and from several women in states bordering Iowa. The callers from out of state wanted to see if they could give support to current breastfeeding mothers.

Both women and men called voicing support for the breastfeeding ad campaign. Several callers wanted to support other breastfeeding women, and were referred to local breastfeeding coalitions and La Leche League of Iowa. Calls were also received from a few individuals who felt that breastfeeding was a personal matter between a woman and her health care provider, and should not be the subject for a media campaign.

Tables 12-19 below profile the demographic information on the callers in 1997 and 1998.

In 1998, the time frame for logging calls was somewhat shorter (approximately 5 weeks) than that of 1997 which may account for the smaller number of callers in 1998 (n=34).

As was true in 1997, callers in 1998 were asked a few demographic questions before being connected to a nutrition consultant. Similar demographic characteristics existed between the two campaign years. The focus of the calls was also similar with the questions falling into the same four categories as they did in 1997.

The foci of the breastfeeding information that women sought were: 1) general or basic information, 2) support issues, 3) returning to work or school, and 4) breastfeeding management.

Table 12: Where Did You Get This 800 Number to Call About Breastfeeding?

Media	# Responses 1997	# Responses 1998
TV only	79	20
Billboard only	11	3
Newspaper	3*	0
TV and Billboard	12	4
Radio only	0	3
TV, Radio, Billboard	0	3
Radio, Billboard	0	1

*Phone number obtained from a newspaper article in which a picture of the billboard ad was included.

Table 13: What Was the Message in the Ad You Saw or Heard?

Message	# Responses 1997	# Responses 1998
Breastfeeding keeps us close	45	10
Family and friends help	25	7
Helpful hints	38	8
Other	2	1
Cannot remember	13	9
Declined to answer	0	3

Table 14: Are You on WIC?

Answer	# Responses 1997	# Responses 1998
Yes	24	8
No	79	25
Declined to answer	0	1

Table 15: Are You Pregnant?

Answer	# Responses 1997	# Responses 1998
Yes	26	7
No	77	27
Declined to answer	0	0

Table 16: What Race or Ethnic Group Do You Identify With?

Race/Ethnic Group	# Responses 1997	# Responses 1998
Black or African American	3	1
White	95	32
Mexican or Mexican American	2	0
Puerto Rican or Cuban	0	0
Other Hispanic, Latino, Latin American	0	0
American Indian or Native American	1	0
Asian American	0	0
Other	0	0
Declined to answer	1	1

Table 17: What County Do You Live In?

County	# Responses 1997	# Responses 1998	County	# Responses 1997	# Responses 1998
Adair	1	0	Johnson	5	0
Allamakee	1	0	Linn	7	1
Benton	1	0	Mahaska	1	0
Black Hawk	6	1	Marshall	4	0
Boone	1	2	Montgomery	1	0
Bremer	1	0	Page	0	1
Buchanan	1	0	Plymouth	1	0
Buena Vista	1	1	Polk	27	7
Carroll	1	0	Pottawattamie	0	4
Cedar	1	0	Poweshiek	2	1
Clarke	0	1	Sac	1	0
Clay	1	0	Scott	0	4
Clayton	1	0	Story	2	1
Dallas	2	0	Tama	0	1
Dubuque	3	1	Warren	4	1
Fayette	1	0	Washington	1	0
Greene	1	0	Webster	1	0
Guthrie	1	0	Woodbury	11	0
Hamilton	1	0	Illinois	1	2
Hardin	1	0	South Dakota	1	0
Howard	1	1	Nebraska	1	0
Humboldt	0	1	Visiting Iowa	0	1
Jasper	2	0	Declined to answer	0	1

Table 18: How Old Are You?

Age	# Responses 1997	# Responses 1998
<20 years	8	3
20-25 years	30	11
26-30 years	24	5
31-35 years	28	9
36-40 years	5	1
41+ years	6	3
Declined to answer	1	1

Table 19: Reason for Call

Area or Topic	# Responses 1997	# Responses 1998
More information about breastfeeding	52	10
Support issues	11	2
Returning to work or school	10	6
Breastfeeding management	20	5
Excited to see ad	4	3
Negative comments about bf ad	2	0

Calls requesting general or basic breastfeeding information were mainly received from pregnant women who were considering breastfeeding. To reinforce the telephone conversation, WIC state nutrition consultants sent printed materials targeted to their questions and concerns, and made referrals to community support systems.

Women seeking support were often looking for a local support group. Contact information was given for La Leche League, hospital support groups, or in some cases a local lactation consultant or WIC agency.

Questions pertaining to returning to work or school focused on how to store collected breastmilk, giving a baby a combination of breastmilk and formula, and issues related to breast pumps.

Breastfeeding women called in with a wide range of breastfeeding management questions. Often times these women were referred to a lactation consultant and other health care professionals in their communities. Management topics that women had questions about included: relactation, biting, alcohol use, mastitis, medications, breastfeeding twins, weaning the older infant, and latching the baby onto the breast.

General Conclusions

Campaign Evaluation

Iowa's implementation of the WIC National Breastfeeding Promotion Project, *Loving Support Makes Breastfeeding Work*, resulted in a number of significant indicators of increased awareness of positive breastfeeding messages and more positive attitudes toward breastfeeding among WIC mothers. A systematic evaluation of the campaign demonstrated marked differences in the extent to which mothers reported that they had seen or heard messages about breastfeeding. As intended, mothers in the post-campaign sample were significantly more likely than those in the baseline to report having heard or seen messages. And although it is not possible to fully understand all of the factors involved, perceptions of support for breastfeeding from family and friends were also more frequently reported in the post-campaign sample than the baseline. It is possible that members of mothers' social networks were also impacted by the campaign or it is also possible that the mothers' increased awareness might have had an impact on their attention to and perceptions of breastfeeding messages resulting in increased salience of such communications. Perceptions of general support for breastfeeding, measured by affirmative responses to the item "I have someone I can go to for advice about breastfeeding" also increased significantly from baseline to post-campaign. Finally, significantly higher proportions of mothers agreed with statements attesting to the value of breastfeeding in the post-campaign versus the baseline samples.

Additional Indicators

A review of call tallies from the 800 WIC line indicates that mothers beyond the WIC population were also reached by the campaign. Information provided through this line clearly provided benefits to mothers throughout the state.

Related Activities

The *Loving Support Makes Breastfeeding Work* campaign provided the momentum needed for other breastfeeding projects in Iowa that might not otherwise have happened. These included:

- TV news stories, newspaper articles, and topics for radio segments;
- Coalitions partnered to carry out local projects;
- Presentations and exhibits to professional organizations; and
- Designation of lactation rooms in the State Capitol Complex.

Informational displays about the campaign and Iowa's implementation took place at several conferences. The conferences included:

- Annual Iowa Dietetic Association Meeting;
- Iowa WIC Program Conference;
- Annual Breastfeeding Conference;
- Annual Maternal and Child Health Leadership Conference in Chicago; and
- Family Services Bureau Grantee Seminar.

Presentations about the campaign were made at the following meetings:

- Governor's Conference on Iowa's Community Solutions for Health Issues;
- American Academy of Pediatrics Chapter Breastfeeding Coordinators Training Conference;
- USDA Breastfeeding Promotion Consortium;
- National WIC Association Conference;
- National WIC Association Nutrition Education and Breastfeeding Conference; and
- Annual Iowa WIC Conference.

Limitations

The key limitations to the project were (1) the lack of a control group for assessing the impact of the media campaign, and (2) a potential self-selection bias among respondents. While the data are very supportive of a positive effect from the campaign, it is also clear that general breastfeeding rates were increasing during this same time frame. And although the degree of change noted between the baseline and post-campaign surveys is dramatic, other general factors that might have played a positive role during this time cannot be ruled out as potential contributing factors.

The other limitation is the self-selection bias among respondents. A widespread limitation of survey designs, this bias may result in restricted generalizability of the findings. As noted in the evaluation summary, respondents in both samples were more educated, more likely to be married, and were older than the general WIC population in Iowa. This demographic profile is consistent with that of breastfeeding mothers and suggests that those mothers more likely to breastfeed were probably over-represented in these samples. This is consistent with the finding that more than seven in ten mothers in both samples reported that they breastfed compared to approximately half of WIC mothers breastfeeding overall during this time period. Without further investigation, it is not possible to assess the importance of this over-representation. It is possible that these mothers were more likely to be affected by the media messages. However, it may also be the case that mothers who did not respond were also positively affected. Further study would be necessary to provide insight into these questions.

Summary

Despite the limitations, Iowa's participation in the WIC National Breastfeeding Promotion Project, *Loving Support Makes Breastfeeding Work*, was overwhelmingly successful. The project effectively utilized multiple media modalities reaching the vast majority of WIC participants. Results of the media campaign evaluation revealed dramatic increases in awareness of breastfeeding messages and more positive breastfeeding attitudes. Profiles of callers to the 800 line demonstrated the far-reaching impact of the campaign beyond the WIC population across the state. The relationship of breastfeeding attitudes to behavior has been clearly linked in numerous studies. Hence, promotional efforts such as these should yield important long-term payoffs of increased breastfeeding rates among Iowa's WIC mothers specifically, in addition to the more general population; and this in turn should result in healthier mothers and babies.

References

Abbott Laboratories, Mothers Survey, Ross Products Division, 2000.

Lindenberger JH, Bryant CA: Promoting breastfeeding in the WIC Program: A social marketing case study. *American Journal of Health Behavior* 24(1):53-60, 2000.

McLorg PA, Bryant CA: Influence of social network members and health care professionals on infant feeding practices of economically disadvantaged mothers. *Medical Anthropology* 10:265-278, 1989.

Saunders SE, Carroll J; Post-partum breast feeding support: impact on duration. *Journal of the American Dietetic Association* 88:213-215, 1988.

Woollett A: Who breastfeeds? The family and cultural context. *Journal of Reproductive and Infant Psychology* 5:127-131, 1987.

**THIS PAGE
INTENTIONALLY LEFT
BLANK**

Appendix A

Cover Letter	p. 34
Reminder Letter	p. 35
Final Follow-Up Letter	p. 36
Postcard	p. 37
1997 Questionnaire	p. 38
1998 Questionnaire	p. 43

Cover Letter



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF PUBLIC HEALTH
CHRISTOPHER G. ATCHISON, DIRECTOR

Dear WIC participant:

The Iowa WIC Program would like to know how WIC participants feed their babies during their first six months of life. Please tell us how you fed your baby by filling out the enclosed survey. In return, we will enter your name in a drawing for four prizes: a check for \$100, a check for \$75, a check for \$50, and a check for \$25. Only 2,000 WIC participants have been invited to participate in the survey so your chance of winning a prize is 1 in 500!

Please fill in the survey and mail it to us in the enclosed stamped envelope right away. Do not put your name on the survey. That way, no one will ever know your answers. To enter the drawing, just fill out the enclosed postcard and mail it to us separately from the survey. Please be sure that your address and telephone number are written clearly on the postcard so we can let you know if you win.

If you have any questions about the survey, please call 1-800-532-1570 and ask for Holly or Brenda.

Thank you for your help on this very important subject. We will use the results to make the WIC Program better.

Sincerely,

Holly Szcodronski
Holly Szcodronski, R.D., L.D.
Breastfeeding Promotion Coordinator

Brenda Dobson
Brenda Dobson, M.S., R.D., L.D.
WIC Nutrition Services Coordinator

Enclosures: Survey
Envelope
Postcard

h:\loving\letter1.doc

LUCAS STATE OFFICE BUILDING / DES MOINES, IOWA 50319-0075 / 515-281-5787
FAX # (515) 281-4958 / TDD-DEAF SERVICES #(515) 242-6156

Reminder Letter



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF PUBLIC HEALTH
CHRISTOPHER G. ATCHISON, DIRECTOR

Dear WIC participant:

Hello! Last week we sent you a survey about feeding your baby. Your name was drawn from a list of WIC participants who had a baby in the last year.

If you have already filled out and mailed the survey, please accept our sincere thanks. If not, please fill it out and mail it to us today. It has been sent to only a small number of people so it is very important for you to give us your opinions.

If by some chance you did not receive your survey, or it got lost, please call 1-800-532-1579 and request another copy.

If you prefer to answer the survey questions on the phone, please call 1-800-532-1579 and tell them your phone number. Someone will call you back and ask you the questions. No one will need to know your name.

Thank you for your help!

Sincerely,

Holly Szcodronski
Holly Szcodronski, R.D., L.D.
Breastfeeding Promotion Coordinator

Brenda Dobson
Brenda Dobson, M.S., R.D., L.D.
WIC Nutrition Services Coordinator

h:\lovingletter2.doc

LUCAS STATE OFFICE BUILDING / DES MOINES, IOWA 50319-0075 / 515-281-5787
FAX # (515) 281-4958 / TDD-DEAF SERVICES #(515) 242-6156

Final Follow-up Letter



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF PUBLIC HEALTH
CHRISTOPHER G. ATCHISON, DIRECTOR

Dear WIC participant:

I am writing you about a survey we sent to you about feeding your baby. We have not yet received your completed survey. In case the survey did not reach you, we are sending you another one. Please complete and return it as soon as possible. To show our thanks for taking time to fill it out, we will enter your name in a drawing for four prizes: a check for \$100, a check for \$75, a check for \$50, and a check for \$25.

Just fill out the survey and mail it to us in the enclosed stamped envelope right away. Do not put your name on the survey. That way, no one will ever know your answers. To enter the drawing, just fill out the enclosed postcard and mail it to us separately from the survey booklet. Please be sure that your address and telephone number are written clearly on the postcard so we can let you know if you win.

We will be happy to send you a copy of the result of the study if you want one. Just write "copy of results requested" below your phone number. We expect to have them ready to send in three months.

If you have any questions about the survey, please call 1-800-532-1579 and ask for Holly or Brenda.

Your help with this project is greatly appreciated.

Sincerely,

Holly Szcodronski, R.D., L.D.
Breastfeeding Promotion Coordinator

Brenda Dobson, M.S., R.D., L.D.
WIC Nutrition Services Coordinator

Enclosures: Survey
Postcard
Envelope

h:\oving\letter3.doc

LUCAS STATE OFFICE BUILDING / DES MOINES, IOWA 50319-0075 / 515-281-5787
FAX # (515) 281-4958 / TDD-DEAF SERVICES #(515) 242-6156

Postcard

To enter the drawing for four cash prizes, please fill out this card and drop it in the mail at the same time that you mail us your survey.

Name _____

Street Address _____

City or town _____ Zip Code _____

Telephone Number () _____

1997 Questionnaire

Your opinions matter to us!

We would like your opinions about feeding your baby. Please check the box next to your answer.

1. How many times did you visit the WIC program office while you were pregnant?

_____ times

2. Have you ever breastfed any of your children?

₁ YES

₂ NO

3. Did you ever breastfeed your most recent child?

₁ YES

₂ NO

4. How long did you breastfeed your most recent child?

_____ weeks

₉₉₉ I DID NOT BREASTFEED MY MOST RECENT CHILD.

5. How old was your child when you gave him/her formula for the first time?

_____ WEEKS

₉₉₉ I DID NOT BREASTFFD MY MOST RECENT CHILD.

₉₉₉ I HAVE NOT YET GIVEN MY MOST RECENT CHILD ANY FORMULA.

6. How old was your child when you stopped breastfeeding?
- _____ weeks
-]₉₉₉ I DID NOT BREASTFEED MY MOST RECENT CHILD.
-]₉₉₉ I HAVE NOT YET GIVEN MY MOST RECENT CHILD ANY FORMULA.
7. Why did you stop breastfeeding? (Check only one)
-]₉₉₉ I DID NOT BREASTFEED MY MOST RECENT CHILD.
-]₉₉₉ I AM STILL BREASTFEEDING.
-]₁ I DID NOT HAVE ENOUGH MILK.
-]₂ FORMULA FEEDING WAS MORE CONVENIENT.
-]₃ I HAD SORE NIPPLES.
-]₄ I RETURNED TO A JOB OR TO SCHOOL.
-]₅ MY BABY WAS ILL AND UNABLE TO BREASTFEED.
-]₆ I BREASTFED FOR AS LONG AS I PLANNED TO.
-]₇ OTHER (WRITE IN: _____)
8. How satisfied were you with the information and advice about infant feeding that WIC employees gave you during your pregnancy?
-]₁ VERY SATISFIED
-]₂ SATISFIED
-]₃ DISSATISFIED
-]₄ VERY DISSATISFIED
9. During your pregnancy, did any of the following people encourage you to breastfeed? (Check all that apply)
-]₁ THE FATHER OF THE BABY
-]₂ YOUR MOTHER
-]₃ YOUR HEALTH CARE PROVIDER
-]₄ THE PEOPLE WHO WORK IN THE WIC PROGRAM
-]₅ A FRIEND OR OTHER RELATIVE

10. Breastfeeding can be very enjoyable for the mother.
- ₁ STRONGLY DISAGREE
- ₂ DISAGREE
- ₃ AGREE
- ₄ STRONGLY AGREE
11. Babies who are breastfed are healthier than babies who have been fed with formula.
- ₁ STRONGLY DISAGREE
- ₂ DISAGREE
- ₃ AGREE
- ₄ STRONGLY AGREE
12. I wish I had been given more information about breastfeeding.
- ₁ STRONGLY DISAGREE
- ₂ DISAGREE
- ₃ AGREE
- ₄ STRONGLY AGREE
13. I have someone I can go to for advice about breastfeeding.
- ₁ STRONGLY DISAGREE
- ₂ DISAGREE
- ₃ AGREE
- ₄ STRONGLY AGREE
14. Breastfeeding gives the mother a very special feeling
- ₁ STRONGLY DISAGREE
- ₂ DISAGREE
- ₃ AGREE
- ₄ STRONGLY AGREE

15. During your pregnancy, did you see anything about breastfeeding on television?
[]₁ NO
[]₂ YES
16. During your pregnancy, did you hear anything about breastfeeding on the radio?
[]₁ NO
[]₂ YES
17. During your pregnancy, did you see anything about breastfeeding on a billboard?
[]₁ NO
[]₂ YES
18. During your pregnancy, did you read anything about breastfeeding in a pamphlet or brochure?
[]₁ NO
[]₂ YES

The last questions are about you and your family.

19. What is your marital status?
[]₁ MARRIED
[]₂ SEPARATED OR DIVORCED
[]₃ WIDOWED
[]₄ NEVER MARRIED
[]₅ A MEMBER OF AN UNMARRIED COUPLE

20. Are you presently: (Check all that apply to you)
- ₁ EMPLOYED FULL TIME OUTSIDE THE HOME
 - ₂ EMPLOYED PART TIME OUTSIDE THE HOME
 - ₃ EMPLOYED IN A TEMPORARY OR SEASONAL JOB
 - ₄ UNEMPLOYED
 - ₅ FULL TIME STUDENT
 - ₆ PART TIME STUDENT
21. How do you describe yourself? (Check all that apply to you)
- ₁ BLACK OR AFRICAN AMERICAN
 - ₂ WHITE (NOT HISPANIC)
 - ₃ MEXICAN OR MEXICAN AMERICAN
 - ₄ PUERTO RICAN OR CUBAN
 - ₅ OTHER HISPANIC, LATINO OR LATIN AMERICAN
 - ₆ AMERICAN INDIAN/NATIVE AMERICAN
 - ₇ ASIAN AMERICAN
 - ₈ OTHER (WRITE IN: _____)
22. What is the last grade or year in school that you have completed?
- ₁ EIGHTH GRADE OR LESS
 - ₂ GRADES 9 THROUGH 11
 - ₃ COMPLETED HIGH SCHOOL OR GED
 - ₄ SOME VOCATIONAL OR TECHNICAL SCHOOL
 - ₅ COMPLETED VOCATIONAL OR TECHNICAL SCHOOL
 - ₆ SOME COLLEGE OR UNIVERSITY
 - ₇ COMPLETED COLLEGE OR UNIVERSITY
23. How old are you now? _____ YEARS
24. How many children do you have? _____
25. What is your zip code? _____

1998 Questionnaire

Your opinions matter to us!

We would like your opinions about feeding your baby. Please check [✓] the box next to your answer.

The first questions are about the time when you were pregnant with your youngest child.

1. Were you enrolled in the WIC program when you were pregnant with your **youngest** child?
 ¹ Yes
 ² No
 ³ I Do Not Remember

2. Are you or your children enrolled in the WIC program now?
 ¹ Yes
 ² No
 ³ I Am Not Sure

3. When you were pregnant with your **youngest** child, how satisfied were you with the information and advice that WIC employees gave you about infant feeding?
 ¹ Very Satisfied
 ² Somewhat Satisfied
 ³ Somewhat Dissatisfied
 ⁴ Very Dissatisfied
 ⁵ I Was Not Enrolled in WIC During My Last Pregnancy

4. Did any of the employees who work in the WIC program encourage you to breastfeed your **youngest** child?
 ¹ Yes
 ² No
 ³ I Do Not Remember
 ⁴ I Was Not Enrolled In WIC During My Last Pregnancy

5. Did any of the health professionals who gave you prenatal care check-ups encourage you to breastfeed your **youngest** child?

- ¹ Yes
- ² No
- ³ I Do Not Remember

6. Did the father of your baby encourage you to breastfeed your **youngest** child?

- ¹ Yes
- ² No
- ³ I Do Not Remember
- ⁴ I Was Not in Contact With Him During My Last Pregnancy

7. Did your mother encourage you to breastfeed your **youngest** child?

- ¹ Yes
- ² No
- ³ I Do Not Remember
- ⁴ My Mother is Not Living
- ⁵ I Was Not in Contact With Her During My Last Pregnancy

8. Did any of your friends encourage you to breastfeed your **youngest** child?

- ¹ Yes
- ² No
- ³ I Do Not Remember

9. During your pregnancy, did you see anything about **breastfeeding** on **television**?

- ¹ Yes
- ² No
- ³ I Do Not Remember

10. During your pregnancy, did you hear anything about breastfeeding on the **radio**?

- ¹ Yes
- ² No
- ¹ Do Not Remember

11. During your pregnancy, did you see anything about breastfeeding on a **billboard**?

- ¹ Yes
- ² No
- ³ I Do Not Remember

12. During your pregnancy, did you read anything about breastfeeding in a **pamphlet** or **brochure**?

- ¹ Yes
- ² No
- ³ I Do Not Remember

13. During your pregnancy, did you see anything about breastfeeding in the **newspaper**?

- ¹ Yes
- ² No
- ³ I Do Not Remember

The next questions ask for your opinions about breastfeeding. Please tell us how strongly you agree or disagree with each of the statements about breastfeeding. It does not matter if you have ever breastfed or not.

14. Breastfeeding can be very enjoyable for the mother.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 No Opinion
- 4 Somewhat Disagree
- 5 Strongly Disagree

15. Babies who are breastfed are healthier than babies who have been fed formula.

- ¹ Strongly Agree
- ² Somewhat Agree
- ³ No Opinion
- ⁴ Somewhat Disagree
- ⁵ Strongly Disagree

16. I wish I had been given more information about breastfeeding.

- ¹ Strongly Agree
- ² Somewhat Agree
- ³ No Opinion
- ⁴ Somewhat Disagree
- ⁵ Strongly Disagree

17. I have someone I can go to for advice about breastfeeding.

- ¹ Strongly Agree
- ² Somewhat Agree
- ³ No Opinion
- ⁴ Somewhat Disagree
- ⁵ Strongly Disagree

18. Breastfeeding gives the mother a very special feeling.

- ¹ Strongly Agree
- ² Somewhat Agree
- ³ No Opinion
- ⁴ Somewhat Disagree
- ⁵ Strongly Disagree

The next questions are about how you fed your youngest child.

19 Did you ever breastfeed your **youngest child**?

- ¹ Yes
- ² No
- ³ I Do Not Remember

20. How old was your **youngest child** when you gave him/her infant formula for the first time?

- _____ Weeks Old
- ⁹⁹ I Have Never Given my **Youngest Child** any Formula

21. How old was your **youngest child** when you stopped giving him or her any breast milk?

- _____ Weeks Old
- ⁹⁹ I still Give My Child Some Breast Milk

22. When you were **in the hospital**, what type of milk(s) was your **youngest child** fed? (Check **all** the milks your baby was fed)

- ¹ Breast Milk
- ² Formula
- ³ Cow's Milk (whole, skim, lowfat)
- ⁴ Other (please write the type of milk): _____

23. When your **youngest** child was 1 week old, what type of milk(s) was he or she fed? (Check **all** the milks your baby was fed)

- ¹ Breast Milk
- ² Formula
- ³ Cow's Milk (whole, skim, lowfat)
- ⁴ Other (please write the type of milk): _____

24. When your **youngest child** was **1 month old**, what type of milk(s) was he or she fed? (Check all the milks your baby was fed)

- ¹ Breast Milk
- ² Formula
- ³ Cow's Milk (whole, skim, lowfat)
- ⁴ Other (please write the type of milk): _____

25. When your **youngest child** was **3 months old**, what type of milk(s) was he or she fed? (Check **all** the milks your baby was fed)

- ¹ Breast Milk
- ² Formula
- ³ Cow's Milk (whole, skim, lowfat)
- ⁴ Other (please write the type of milk): _____

26. When your **youngest child** was **6 months old**, what type of milk(s) was he or she fed? (Check **all** the milks your baby was fed)

- ¹ Breast Milk
- ² Formula
- ³ Cow's Milk (whole, skim, lowfat)
- ⁴ Other (please write the type of milk): _____

27. When your **youngest child** was **1 year old**, what type of milk(s) was he or she fed? (Check **all** the milks your baby was fed)

- ¹ Breast Milk
- ² Formula
- ³ Cow's Milk (whole, skim, lowfat)
- ⁴ Other (please write the type of milk): _____

28. During the **last week**, what type of milk(s) was your **youngest child** fed? (Check all the milks your baby was fed)

¹ Breast Milk

² Formula

³ Cow's Milk (whole, skim, lowfat)

⁴ Other (please write the type of milk): _____

29. If you ever breastfed your **youngest child**, but do not now, why did you stop breastfeeding? (Check only one)

¹ I Did Not Breastfeed My Youngest Child

² I Am Still Breastfeeding

³ I Breastfed As Long As I Planned To

⁴ I Got Sick

⁵ I Had Sore Nipples

⁶ I Returned to A Job or To School

⁷ Formula Feeding Was More Convenient

⁸ I Did Not Have Enough Milk

⁹ My Baby Was Too Sick

¹⁰ My Baby Was Biting Me

¹¹ My Baby Weaned Him/Herself

¹² Other (please write the reason):

The last questions are about you and your family.

30. How old is your **youngest** child right now? _____ months

31. How many children have you given birth to? _____
(number of children)

32. How many of these children did you give any breast milk? _____
(number of children)

33. Did your mother breastfeed you?

¹ Yes

² No

³ I Am Not Sure

34. What is your marital status?

¹ Married

² Separated or Divorced

³ Widowed

⁴ Never Married

35. At this time, are you: (check **all** that apply)

¹ Employed Full-Time Outside the Home

² Employed Part-Time Outside the Home

³ Employed in A Temporary or Seasonal Job

⁴ Unemployed

⁵ Full-Time Student

⁶ Part-Time Student

36. What is your ethnicity (what ethnic group do you belong to)?

- ¹ Black or African American
- ² White (Not Hispanic)
- ³ Mexican or Mexican American
- ⁴ Puerto Rican or Cuban
- ⁵ Other Hispanic, Latino, or Latin American
- ⁶ Native American or American Indian
- ⁷ Asian American
- ⁸ Other (Write In): _____

37. What is the last grade or year in school that you have completed? (Check only one)

- ¹ Grade 8 or Less
- ² Grades 9 Through 11
- ³ Completed High School or GED
- ⁴ Some Vocational or Technical School
- ⁵ Completed Vocational or Technical School
- ⁶ Some College or University
- ⁷ Completed College or University

38. How old are you now? _____ Years Old

39. What is your zip code? _____

Please fill in the blanks in the statement below.

40. Breastfeeding makes me feel _____
because _____

Other Comments:

Appendix B

How to Handle Telephone Calls About Breastfeeding	p. 54
Answering Telephone Calls About Breastfeeding	p. 55
Demographic Characteristics of Callers	p. 57
Logs of Calls in Response to the <i>Loving Support</i> Project	p. 59

How to Handle Telephone Calls About Breastfeeding

Introduction When the *Loving Support* media promotions are run, we expect to receive telephone calls about breastfeeding on the WIC 800 number. This document describes the routing procedure for those calls.

Before forwarding the call When a caller asks a question about breastfeeding, please complete one of the *Demographic Characteristics of Callers* questionnaires (a copy is attached). The text printed in bold print is suggested text for introducing the questions and thanking the caller for the information. The text printed in italics provides directions. When you finish the questionnaire, forward the caller to a nutrition consultant.

Note: A caller may decline to answer any or all of the questions. Please mark any questions that are declined as “Declined to answer.”

Forwarding calls Breastfeeding questions should be forwarded to the nutrition consultants in the following order:

- Holly
- Brenda
- Jan, Susan, Angie, Doris, or Emily.

Note: If all of the nutrition consultants are out of the office, please take the caller’s name and telephone number so that a return call can be made.

Answering Telephone Calls About Breastfeeding

Introduction If Holly and Brenda are out of the office, other nutrition consultants will receive telephone calls about breastfeeding from the 800 line. This page provides tips for responses and lists suggested resources for use as reference and to send to the caller.

Tips for answering calls The table below lists general subject areas for breastfeeding questions and examples of responses and resources.

IF the question is about...	THEN...	Suggested Resources
The benefits of breastfeeding	<ul style="list-style-type: none"> • Answer questions, and • Provide information about other benefits the caller doesn't mention. 	<ul style="list-style-type: none"> • <i>Thinking about breastfeeding</i> • <i>Breastfeeding: For All The Right Reasons</i> • Breastfeeding bookmark
How to breastfeed	<ul style="list-style-type: none"> • Provide breastfeeding management information at your own comfort level • Refer to local WIC agency in caller's community • Send written information related to question or concern 	<ul style="list-style-type: none"> • <i>Getting started</i> • <i>The early weeks</i> • <i>Common concerns</i> • <i>Returning to work or school</i> • <i>Don't shy away from breastfeeding (embarrassment)</i> • <i>Breastfeeding works around my busy schedule (busy moms)</i> • <i>Breastfeeding Bookfinder</i> • <i>Breastfeeding in the 1st Week: A Counseling Guide (laminated — use as reference only; do not mail)</i>
Finding support	<ul style="list-style-type: none"> • Ask where the caller lives • Identify potential sources of support using resources listed in the next column • Provide the LLLI 800 number (1-800-525-3243) 	<ul style="list-style-type: none"> • <i>Referral Resources (IBCLCs)</i> • Local WIC agency listing • <i>Give a breastfeeding mom your loving support (encouragement)</i>
Interest in promoting breastfeeding in caller's community	<ul style="list-style-type: none"> • Check to see if a community breastfeeding coalition exists in the caller's community • Send information related to the question 	<ul style="list-style-type: none"> • Map and list of community-based coalitions and contact persons • Iowa Lactation Task Force membership brochure • ILTF order form • Bureau order form

Continued on next page

Answering Telephone Calls About Breastfeeding, Continued

**Document each
call you take**

Please use the log on the next page to record basic information about the calls you take. At the end of each week, give the completed log to Holly.

**Thanks for your
help!**

We're excited about the Loving Support project and the number of calls we may receive. We appreciate your help in answering these questions.

Demographic Characteristics of Callers

Thank you for calling. Before I connect you with someone who can answer your question about breastfeeding, I'd like to ask a few questions about how you got this telephone number. These questions are anonymous so your answers are confidential. Your answers will help us evaluate WIC's breastfeeding promotion activities.

1. **Where did you get this 800 number to call about breastfeeding?**

- a. Television ad
- b. Radio ad
- c. Outdoor billboard (*If this is the only answer given, skip to question 3.*)
- d. Newspaper ad (*If this is the only answer given, skip to question 3.*)
- d. Other: Briefly describe: _____
(*If other is the only answer given, skip to question 3.*)

2. ***If TV or radio ad, ask:* What was the message in the ad you saw or heard?**

- a. Breastfeeding helps us keep close even when we're apart
- b. Family and friends help with breastfeeding
- c. Helpful hints about breastfeeding from your baby
- d. Other: Briefly describe: _____
- e. Cannot remember

3. **Are you on WIC?**

- a. Yes
- b. No
- c. Declined to answer

4. **Are you pregnant?**

- a. Yes
- b. No
- c. Declined to answer

5. **What race or ethnic group do you identify with?**

- a. Black or African American
- b. White (not Hispanic)
- c. Mexican or Mexican American
- d. Puerto Rican or Cuban
- e. Other Hispanic, Latino or Latin American
- f. American Indian or Native American
- g. Asian American
- h. Other (write in: _____)
- i. Declined to answer

6. **What county do you live in?**

- a. _____
- b. Declined to answer

7. **How old are you?**

- a. _____ years
- b. Declined to answer

8. **Are you:**
___ a. Female?
___ b. Male?

9. *Record today's date:* ___ / ___ / ___

Thank you for answering these questions. Your answers will be very helpful to us. Now I will connect you with someone who can help you with your question about breastfeeding.

Log of Calls In Response to the *Loving Support Project*

For the week of _____ Record information about each call in the table below. Please record your name in the upper right corner of each page.

Date	Question	Response/materials sent	Referrals made
