

APPENDIX C

NUTRITION EDUCATION OBSERVATION FORMS



NUTRITION EDUCATION OBSERVATION CHECKLIST

Individual Session -- Prenatal Visit

(continued)

ASSESSMENT DATA

	Obtained by WIC Staff	Self-report	Medical Record	Not Obtained	Not Applicable
24-hour recall					
Food frequency					
Current weight					
Prepregnancy weight					
Height					
Food likes/dislikes					
Allergies/intolerances					

TOPICS COVERED

	Assessed	Discussed	Written Material	Video	Not Covered
DIET AND PREGNANCY					
Foods/nutrients low in participant's diet					
Recommended weight gain (total lbs. and/or lbs. per week or trimester)					
Participant's relative rate of weight gain					
Managing common problems of pregnancy (N&V, heartburn, constipation)					
Importance of adequate iron intake for prevention of anemia					
Effects of smoking					
Effects of alcohol and drugs					
Effects of caffeine					
Importance of regular prenatal care					
Prenatal vitamin and mineral supplement recommendations					
Importance of consulting doctor prior to taking over-the-counter or prescription drugs					
Other (specify): _____ _____					

NUTRITION EDUCATION OBSERVATION CHECKLIST

Individual Session -- Prenatal Visit

(continued)

	Assessed	Discussed	Written Material	Video	Not Covered
BREASTFEEDING					
Infant feeding preference					
Benefits of breastfeeding					
Management of common breastfeeding problems (e.g. sore nipples, engorgement, milk supply)					
Breastfeeding techniques/positions					
Breastfeeding in the hospital					
Breastfeeding support services/programs (e.g. La Leche League)					
Breast pumps					
Combining breastfeeding and bottle feeding					
Returning to work or school while breastfeeding					
Infant growth spurts and increased breastfeeding demand					
Nipple confusion					
Importance of ample fluids					
Effects of alcohol and other drugs on breastfed infant					
Importance of consulting doctor before taking any over-the-counter or prescription drugs					
AIDS/HIV and contraindication for breastfeeding					
Other (specify): _____ _____					

BREASTFEEDING PROMOTION	Yes	No	N/A
Counselor advocates breastfeeding			
Counselor remains supportive and non-judgmental if participant indicates preference for bottlefeeding			
Counselor investigates participant's beliefs about potential barriers to breastfeeding			
Counselor investigates family/friends support of breastfeeding			
Counselor addresses participant's concerns about breastfeeding in a supportive manner			

NUTRITION EDUCATION OBSERVATION CHECKLIST

Individual Session -- Prenatal Visit

(continued)

WIC PROGRAM/FOODS	Assessed	Discussed	Written Material	Video	Not Covered
Logistics of WIC voucher issuance and use					
Identification of WIC foods					
Supplemental nature of WIC food package					
Rationale for WIC foods (major nutrients)					
Other (specify): _____ _____					

SPECIFIC RECOMMENDATIONS:

- 1. _____
- 2. _____
- 3. _____

- 4. _____
- 5. _____
- 6. _____

NUTRITION EDUCATION OBSERVATION CHECKLIST

Individual Session -- Prenatal Visit

(continued)

EDUCATIONAL AIDS/MATERIALS

	Yes	No
Bulletin boards, flipcharts, posters		
Food packages		
Food demonstrations and/or tasting		
Videos		
Other (specify:) _____		

	No. Reviewed During Session	No. Provided to Take Home
Books		
Brochures, pamphlets, handouts		
Recipes		
Other written material (specify:) _____		

Participant was provided with written materials in appropriate language:

- All 1
- Most 2
- Some 3
- None 4
- N/A 5

NUTRITION EDUCATION OBSERVATION CHECKLIST
Individual Session -- Prenatal Visit
 (continued)

VIDEOS (ONLY)

Title/Topic _____

Start Time |_|_| : |_|_|

End Time |_|_| : |_|_|

Participant was attentive to video:

- Consistently 1
- Sometimes 2
- Rarely 3
- Never 4

Discussion of video was provided:

- Yes 1
- No 2

ENVIRONMENT

Number of children present |_|

	Yes	No	N/A
Space is private enough so that others cannot easily overhear conversation			
Temperature is comfortable: not too warm or too cold			
Noise level is low enough that participants can converse easily without straining or distraction			
Toys or other activities are available for children			
Session is interrupted more than once by children			
Session is interrupted more than once by telephone or other clinic staff			

NUTRITION EDUCATION OBSERVATION CHECKLIST

Individual Session -- Prenatal Visit

(continued)

REFERRALS

	Yes	No
AFDC		
AIDS testing, counseling, treatment		
Alcohol or drug cessation program		
Day care/child care		
Dentist		
EFNEP		
English as a second language or the GED		
Family counseling and crisis intervention		
Family planning/Planned Parenthood		
Food pantry/food bank		
Food Stamps		
Head Start or other child development program		
Housing assistance		
Immunizations		
Job training		
La Leche League or other breastfeeding support program		
Lamaze or other childbirth class		
Legal aid		
Medicaid		
Medical doctor for routine medical care		
Nutrition counseling (outside of WIC)		
Prenatal care		
Smoking cessation program		
Well baby clinic/child health care		
Other (specify): _____		

NUTRITION EDUCATION OBSERVATION CHECKLIST
Individual Session -- Prenatal Visit
 (continued)

STAFF/PARTICIPANT INTERACTION

	Yes	No	N/A
Counselor provides positive feedback about current dietary intake			
Counselor discusses all risk factors			
Counselor investigates potential barriers to recommended behaviors			
Counselor investigates participant's willingness to make behavior changes			
Counselor investigates participant's understanding of a majority of key concepts			
Counselor works cooperatively with participant to negotiate goals for behavior change/improvement			
Counselor offers specific and appropriate ideas on how to implement most or all recommended behaviors			
Counselor provides opportunity for questions			
Participant asks questions or initiates line of discussion more than two times			
Counselor addresses participant's questions or concerns in a supportive manner			
Counselor maintains a non-judgmental attitude at all times			
<i>Only if Followup Visit: Counselor elicits information about specific behaviors with reference to goals identified in previous session</i>			

COMMENTS:

NUTRITION EDUCATION OBSERVATION CHECKLIST
Group Session -- Prenatal Visit
 (continued)

TOPICS COVERED

	Assessed	Discussed	Written Material	Video	Not Covered
DIET AND PREGNANCY					
Recommended diet for pregnancy (general)					
Recommended weight gain (total lbs. and/or lbs. per week or trimester)					
Managing common problems of pregnancy (N&V, heartburn, constipation)					
Importance of adequate iron intake for prevention of anemia					
Effects of smoking					
Effects of alcohol and drugs					
Effects of caffeine					
Importance of regular prenatal care					
Prenatal vitamin and mineral supplement recommendations					
Importance of consulting doctor prior to taking over-the-counter or prescription drugs					
Other (specify): _____					

NUTRITION EDUCATION OBSERVATION CHECKLIST
Group Session -- Prenatal Visit
 (continued)

	Assessed	Discussed	Written Material	Video	Not Covered
BREASTFEEDING					
Infant feeding preference					
Benefits of breastfeeding					
Management of common breastfeeding problems (e.g. sore nipples, engorgement, milk supply)					
Breastfeeding techniques/positions					
Breastfeeding in the hospital					
Breastfeeding support services/programs (e.g. La Leche League)					
Breast pumps					
Combining breastfeeding and bottle feeding					
Returning to work or school while breastfeeding					
Infant growth spurts and increased breastfeeding demand					
Nipple confusion					
Importance of ample fluids					
Effects of alcohol and other drugs on breastfed infant					
Importance of consulting doctor before taking any over-the-counter or prescription drugs					
AIDS/HIV and contraindication for breastfeeding					
Other (specify): _____					

BREASTFEEDING PROMOTION	Yes	No	N/A
Group leader advocates breastfeeding			
Group leader remains supportive and non-judgmental if participant(s) indicate preference for bottlefeeding			
Group leader investigates participants' beliefs about potential barriers to breastfeeding			
Group leader investigates family/friends support of breastfeeding			
Group leader addresses participants' questions or concerns about breastfeeding in a supportive manner			

NUTRITION EDUCATION OBSERVATION CHECKLIST
Group Session -- Prenatal Visit
 (continued)

WIC PROGRAM/FOODS	Assessed	Discussed	Written Material	Video	Not Covered
Logistics of WIC voucher issuance and use					
Identification of WIC foods					
Supplemental nature of WIC food package					
Rationale for WIC foods (major nutrients)					
Other (specify): _____					

SPECIFIC RECOMMENDATIONS:

1. _____
2. _____
3. _____

4. _____
5. _____
6. _____

NUTRITION EDUCATION OBSERVATION CHECKLIST
Group Session -- Prenatal Visit
 (continued)

EDUCATIONAL AIDS/MATERIALS

	Yes	No
Bulletin boards, flipcharts, posters		
Food demonstrations and/or tasting		
Food packages		
Videos		
Other (specify:) _____		

	No. Reviewed During Session	No. Provided to Take Home
Books		
Brochures, pamphlets, handouts		
Recipes		
Other written material (specify:) _____		

All session participants could speak and understand English:

Yes 1
 No 2
 Unable to ascertain 3

Participants were provided with written materials in appropriate language:

All 1
 Most 2
 Some 3
 None 4
 N/A 5

NUTRITION EDUCATION OBSERVATION CHECKLIST

Group Session -- Prenatal Visit

(continued)

VIDEOS (ONLY)

Title/Topic _____

Start Time |_|_| : |_|_|

End time |_|_| : |_|_|

In general, participants were attentive to video:

- Consistently 1
- Sometimes 2
- Rarely 3
- Never 4

Discussion of video was provided:

- Yes 1
- No 2

ENVIRONMENT

Number of children present |_|

	Yes	No	N/A
Space is private enough so that others cannot easily overhear conversation			
Temperature is comfortable: not too warm or too cold			
Noise level is low enough that participants can converse easily without straining or distraction			
Toys or other activities are available for children			
Session is interrupted more than once by children			
Session is interrupted more than once by telephone or other clinic staff			

NUTRITION EDUCATION OBSERVATION CHECKLIST
Group Session -- Prenatal Visit
 (continued)

REFERRALS

	Yes	No
AFDC		
AIDS testing, counseling, treatment		
Alcohol or drug cessation program		
Day care/child care		
Dentist		
EFNEP		
English as a second language or the GED		
Family counseling and crisis intervention		
Family planning/Planned Parenthood		
Food pantry/food bank		
Food Stamps		
Head Start or other child development program		
Housing assistance		
Immunizations		
Job training		
La Leche League or other breastfeeding support program		
Lamaze or other childbirth class		
Legal aid		
Medicaid		
Medical doctor for routine medical care		
Nutrition counseling (outside of WIC)		
Prenatal care		
Smoking cessation program		
Well baby clinic/child health care		
Other (specify): _____ _____		

NUTRITION EDUCATION OBSERVATION CHECKLIST
Group Session -- Prenatal Visit
 (continued)

STAFF/PARTICIPANT INTERACTION

	Yes	No	N/A
Group leader investigates potential barriers to recommended behaviors			
Group leader investigates participants' willingness to make behavior changes			
Group leader investigates participants' understanding of a majority of key concepts			
Group leader offers specific and appropriate ideas on how to implement most or all recommended behaviors			
Group leader provides opportunity for questions			
Participants ask questions or initiate line of discussion more than two times			
Group leader maintains a non-judgmental attitude at all times			
Group leader addresses questions or concerns raised by participants in a supportive manner			
One or more interactive activities are used			
<i>Only if Followup Visit:</i> Group leader elicits information about specific behaviors with reference to goals identified in previous session			

COMMENTS:

NUTRITION EDUCATION OBSERVATION CHECKLIST
Individual Session -- Postpartum Visit
 (continued)

INTRODUCTION

	Yes	No
Counselor introduces self (name; not just "title")		
Counselor has a name tag for identification		
Counselor provides general overview of session		

ASSESSMENT DATA

MOTHER	Obtained by WIC Staff	Self- report	Medical Record	Not Obtained	Not Applicable
24-hour recall					
Food frequency					
Current weight					
Prepregnancy weight					
Weight at delivery					
Height					
Food likes/dislikes					
Allergies/intolerances					

INFANT	Obtained by WIC Staff	Self- report	Medical Record	Not Obtained	Not Applicable
24-hour recall					
Food frequency					
Birthweight					
Birth length					
Current weight					
Current length					
Food likes/dislikes					
Allergies/intolerances					

NUTRITION EDUCATION OBSERVATION CHECKLIST

Individual Session -- Postpartum Visit

(continued)

TOPICS COVERED

BREASTFEEDING	Assessed	Discussed	Written Material	Video	Not Covered
Benefits of breastfeeding					
Management of common breastfeeding problems (e.g. sore nipples, engorgement, milk supply)					
Breastfeeding techniques/positions					
Breastfeeding support services/programs (e.g. La Leche League)					
Breast pumps					
Combining breastfeeding and bottle feeding					
Returning to work or school while breastfeeding					
Infant growth spurts and increased breastfeeding demand					
Nipple confusion					
Importance of ample fluids					
Effects of alcohol and other drugs on breastfed infant					
Importance of consulting doctor before taking any over-the-counter or prescription drugs					
Effects of smoking on infant					
Effects of caffeine on infant					
AIDS/HIV and contraindication for breastfeeding					
Other (specify): _____ _____					

BREASTFEEDING PROMOTION	Yes	No	N/A
Counselor advocates breastfeeding			
Counselor remains supportive and non-judgmental if participant indicates desire to switch to breastfeeding			
Counselor investigates participant's beliefs about potential barriers to breastfeeding			
Counselor investigates family/friends support of breastfeeding			
Counselor addresses participant's concerns about breastfeeding in a supportive manner			

TOPICS COVERED

NUTRITION EDUCATION OBSERVATION CHECKLIST

Individual Session -- Postpartum Visit

(continued)

MOTHER	Assessed	Discussed	Written Material	Video	Not Covered
Recommended healthy diet (general)					
Foods/nutrients low in participant's diet					
Participant's current weight relative to IBW standards					
Weight loss/weight control plan					
Need for iron supplementation for at least 2 months postpartum					
Smoking/effect of second hand smoking on baby					
Importance of postpartum check up with doctor					
Other (specify): _____					
INFANT	Assessed	Discussed	Written Material	Video	Not Covered
Infant feeding practices					
Infant's rate of growth					
Formula preparation and storage					
Infant bottle syndrome					
Infant/toddler growth and development					
Introduction of solid foods - timing and pattern					
Introduction of cup					
Iron fortified formula - rationale and importance					
Other (specify): _____					
WIC PROGRAM/FOODS	Assessed	Discussed	Written Material	Video	Not Covered
Logistics of voucher issuance and use					
Identification of WIC foods					
Supplemental nature of WIC food package					
Rationale for WIC foods (major nutrients)					
Other (specify): _____					

SPECIFIC RECOMMENDATIONS

NUTRITION EDUCATION OBSERVATION CHECKLIST
Individual Session -- Postpartum Visit
 (continued)

1. _____
 2. _____
 3. _____

4. _____
 5. _____
 6. _____

EDUCATIONAL AIDS/MATERIALS

	Yes	No
Bulletin boards, flipcharts, posters		
Food packages		
Food demonstrations and/or tasting		
Videos		
Other (specify): _____		

	No. Reviewed During Session	No. Provided to Take Home
Books		
Brochures, pamphlets, handouts		
Recipes		
Other written material (specify:) _____		

Participant was provided with written materials in appropriate language:

- All 1
- Most 2
- Some 3
- None 4
- N/A 5

NUTRITION EDUCATION OBSERVATION CHECKLIST
Individual Session -- Postpartum Visit
 (continued)

VIDEOS (ONLY)

Title/Topic _____

Start Time |__|__| : |__|__|

End Time |__|__| : |__|__|

Participant was attentive to video:

- Consistently 1
- Sometimes 2
- Rarely 3
- Never 4

Discussion of video was provided:

- Yes 1
- No 2

ENVIRONMENT

Number of infants present |__|

Number of children present |__|

	Yes	No	N/A
Space is private enough so that others cannot easily overhear conversation			
Temperature is comfortable: not too warm or too cold			
Noise level is low enough that participants can converse easily without straining or distraction			
Toys or other activities are available for children			
Session is interrupted more than once by children			
Session is interrupted more than once by telephone or other clinic staff			

NUTRITION EDUCATION OBSERVATION CHECKLIST
Individual Session -- Postpartum Visit
 (continued)

REFERRALS

	Yes	No
AFDC		
AIDS testing, counseling, treatment		
Alcohol or drug cessation program		
Day care/child care		
Dentist		
EFNEP		
English as a second language or the GED		
Family counseling and crisis intervention		
Family planning/Planned Parenthood		
Food pantry/food bank		
Food Stamps		
Head Start or other child development program		
Housing assistance		
Immunizations		
Job training		
La Leche League or other breastfeeding support program		
Legal aid		
Medicaid		
Medical doctor for routine medical care		
Nutrition counseling (outside of WIC)		
Smoking cessation program		
Well baby clinic/child health care		
Other (specify): _____		

NUTRITION EDUCATION OBSERVATION CHECKLIST
Individual Session -- Postpartum Visit
 (continued)

STAFF/PARTICIPANT INTERACTION

	Yes	No	N/A
Counselor provides positive feedback about current dietary intake			
Counselor provides positive feedback about current infant feeding practices			
Counselor discusses all risk factors			
Counselor investigates potential barriers to recommended behaviors			
Counselor investigates participant's willingness to make behavior changes			
Counselor investigates participant's understanding of a majority of key concepts			
Counselor works cooperatively with participant to negotiate goals for behavior change/improvement			
Counselor offers specific and appropriate ideas on how to implement most or all recommended behaviors			
Counselor provides opportunity for questions			
Participant asks questions or initiates line of discussion more than two times			
Counselor addresses questions or concerns raised by participant in a supportive manner			
Counselor maintains a non-judgmental attitude at all times			
<i>Only if Followup Visit:</i> Counselor elicits information about specific behaviors with reference to goals identified in previous session			

COMMENTS:

NUTRITION EDUCATION OBSERVATION CHECKLIST

Group Session -- Postpartum Visit

(continued)

TOPICS COVERED

BREASTFEEDING	Assessed	Discussed	Written Material	Video	Not Covered
Benefits of breastfeeding					
Management of common breastfeeding problems (e.g. sore nipples, engorgement, milk supply)					
Breastfeeding techniques/positions					
Breastfeeding support services/programs (e.g. La Leche League)					
Breast pumps					
Combining breastfeeding and bottle feeding					
Returning to work or school while breastfeeding					
Infant growth spurts and increased breastfeeding demand					
Nipple confusion					
Importance of ample fluids					
Effects of alcohol and other drugs on breastfed infant					
Importance of consulting doctor before taking any over-the-counter or prescription drugs					
Effects of smoking on infant					
Effects of caffeine on infant					
AIDS/HIV and contraindication for breastfeeding					
Other (specify): _____ _____					

BREASTFEEDING PROMOTION	Yes	No	N/A
Group leader advocates breastfeeding			
Group leader remains supportive and non-judgmental if participant indicates desire to switch to breastfeeding			
Group leader investigates participants' beliefs about potential barriers to breastfeeding			
Group leader investigates family/friends support of breastfeeding			
Group leader addresses participants' concerns about breastfeeding in a supportive manner			

NUTRITION EDUCATION OBSERVATION CHECKLIST

Group Session -- Postpartum Visit

(continued)

MOTHER	Assessed	Discussed	Written Material	Video	Not Covered
Recommended healthy diet (general)					
Weight loss/weight control plan					
Need for iron supplementation for at least 2 months postpartum					
Smoking/effect of second-hand smoke on baby					
Importance of postpartum check up with doctor					
Other (specify): _____					
INFANT	Assessed	Discussed	Written Material	Video	Not Covered
Infant feeding practices					
Formula preparation and storage					
Infant bottle syndrome					
Infant/toddler growth and development					
Introduction of solid foods - timing and pattern					
Introduction of cup					
Iron fortified formula - rationale and importance					
Other (specify): _____					
WIC PROGRAM/FOODS	Assessed	Discussed	Written Material	Video	Not Covered
Logistics of voucher issuance and use					
Identification of WIC foods					
Supplemental nature of WIC food package					
Rationale for WIC foods (major nutrients)					
Other (specify): _____					

NUTRITION EDUCATION OBSERVATION CHECKLIST

Group Session -- Postpartum Visit

(continued)

SPECIFIC RECOMMENDATIONS

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

EDUCATIONAL AIDS/MATERIALS

	Yes	No
Bulletin boards, flipcharts, posters		
Food packages		
Food demonstrations and/or tasting		
Videos		
Other (specify:) _____		

	No. Reviewed During Session	No. Provided to Take Home
Books		
Brochures, pamphlets, handouts		
Recipes		
Other written material (specify:) _____		

All session participants could speak and understand English:

- Yes 1
- No 2
- Unable to ascertain 3

Participants were provided with written materials in appropriate language:

- All 1
- Most 2
- Some 3
- None 4
- Not Applicable 5

NUTRITION EDUCATION OBSERVATION CHECKLIST

Group Session -- Postpartum Visit

(continued)

VIDEOS (ONLY)

Title/Topic: _____

Start Time |__|__| : |__|__|

End time |__|__| : |__|__|

In general, participants were attentive to video:

- Consistently 1
- Sometimes 2
- Rarely 3
- Never 4

Discussion of video was provided:

- Yes 1
- No 2

ENVIRONMENT

Number of infants present |__|

Number of children present |__|

	Yes	No	N/A
Space is private enough so that others cannot easily overhear conversation			
Temperature is comfortable: not too warm or too cold			
Noise level is low enough that participants can converse easily without straining or distraction			
Toys or other activities are available for children			
Session is interrupted more than once by children			
Session is interrupted more than once by telephone or other clinic staff			

NUTRITION EDUCATION OBSERVATION CHECKLIST

Group Session -- Postpartum Visit

(continued)

REFERRALS

	Yes	No
AFDC		
AIDS testing, counseling, treatment		
Alcohol or drug cessation program		
Day care/child care		
Dentist		
EFNEP		
English as a second language or the GED		
Family counseling and crisis intervention		
Family planning/Planned Parenthood		
Food pantry/food bank		
Food Stamps		
Head Start or other child development program		
Housing assistance		
Immunizations		
Job training		
La Leche League or other breastfeeding support program		
Legal aid		
Medicaid		
Medical doctor for routine medical care		
Nutrition counseling (outside of WIC)		
Smoking cessation program		
Well baby clinic/child health care		
Other (specify): _____ _____		

NUTRITION EDUCATION OBSERVATION CHECKLIST

Group Session -- Postpartum Visit

(continued)

STAFF/PARTICIPANT INTERACTION

	Yes	No	N/A
Group leader investigates potential barriers to recommended behaviors			
Group leader investigates participants' willingness to make behavior changes			
Group leader investigates participants' understanding of a majority of key concepts			
Group leader offers specific and appropriate ideas on how to implement most or all recommended behavior changes			
Group leader provides opportunity for questions			
Participants ask questions or initiate line of discussion more than two times			
Group leader maintains a non-judgmental attitude at all times			
Group leader addresses questions or concerns raised by participants in a supportive manner			
One or more interactive activities are used			
<i>Only if Followup Visit:</i> Group leader elicits information about specific behaviors with reference to goals identified in previous session			

COMMENTS:



APPENDIX D

SUPPLEMENTARY EXHIBITS



Exhibit D.1

Reasons for Non-Response: Prenatal Survey

SOUTHEAST	Site 1		Site 2	
	Percent of Baseline Sample	Percent of Prenatal Non-responders	Percent of Baseline Sample	Percent of Prenatal Non-responders
Ineligible for prenatal survey				
Early delivery ¹	9%	45%	12%	65%
Terminated pregnancy ²	4	21	4	24
Other ³	0	1	0	1
Not interviewed				
Unlocatable ⁴	5	28	1	3
Refusal	0	0	1	3
Moved out of area	1	5	1	4
MOUNTAIN PLAINS	Site 1		Site 2	
	Percent of Baseline Sample	Percent of Prenatal Non-responders	Percent of Baseline Sample	Percent of Prenatal Non-responders
Ineligible for prenatal survey				
Early delivery ¹	4%	24%	6%	30%
Terminated pregnancy ²	5	31	8	37
Other ³	0	1	1	5
Not interviewed				
Unlocatable ⁴	5	28	2	8
Refusal	2	9	2	10
Moved out of area	1	6	2	11
MIDWEST	Site 1		Site 2	
	Percent of Baseline Sample	Percent of Prenatal Non-responders	Percent of Baseline Sample	Percent of Prenatal Non-responders
Ineligible for prenatal survey				
Early delivery ¹	13%	47%	8%	37%
Terminated pregnancy ²	6	21	8	37
Other ³	0	1	1	3
Not interviewed				
Unlocatable ⁴	6	20	2	9
Refusal	2	5	0	1
Moved out of area	2	6	3	12

¹Delivered before Prenatal survey was attempted (generally between 32 and 36 weeks gestation).

²Includes both miscarriages and abortions. (In the two Mountain Plains sites, as well as in the Site 1 Midwest site, terminated pregnancies may include some women who were not actually pregnant at the time of WIC certification. Mountain Plains does not require proof of pregnancy and the Midwest site allows women to participate up to 90 days without proof of pregnancy.)

³Includes: infant given up for adoption or placed in foster care, infant death, respondent death, and woman not certified for WIC.

⁴Respondent could not be located for prenatal survey but there was no evidence that respondent had moved out of the area. These respondents were retained in the postpartum survey sample.

Exhibit D.2

Reasons for Non-Response: Postpartum Survey

SOUTHEAST	Site 1		Site 2	
	Percent of Baseline Sample	Percent of Postpartum Non-responders	Percent of Baseline Sample	Percent of Postpartum Non-responders
Ineligible for postpartum survey				
Terminated pregnancy	4%	17%	5%	36%
Other ¹	3	13	1	7
Not interviewed				
Moved out of area	5	18	2	11
Unlocatable	12	49	5	38
Refusal	1	2	1	9
MOUNTAIN PLAINS	Site 1		Site 2	
	Percent of Baseline Sample	Percent of Postpartum Non-responders	Percent of Baseline Sample	Percent of Postpartum Non-responders
Ineligible for postpartum survey				
Terminated pregnancy	5%	23%	8%	27%
Other ¹	2	8	6	7
Not interviewed				
Moved out of area	2	7	5	17
Unlocatable	12	53	5	20
Refusal	2	9	8	28
MIDWEST	Site 1		Site 2	
	Percent of Baseline Sample	Percent of Postpartum Non-responders	Percent of Baseline Sample	Percent of Postpartum Non-responders
Ineligible for postpartum survey				
Terminated pregnancy	6%	21%	9%	46%
Other ¹	6	4	4	3
Not interviewed				
Moved out of area	5	17	3	15
Unlocatable	14	50	5	23
Refusal	2	8	3	13

¹Includes: infant given up for adoption or placed in foster care, infant death, respondent death, and woman not certified for WIC.

Exhibit D.3

Characteristics of Baseline Sample and Analytic Samples (Mean Values)

	Baseline Sample	Analytic Samples		
		Baseline Survey, Prenatal Survey, and Abstract	Baseline Survey, Postpartum Survey, and Abstract	All Surveys
Age				
Under 18	0.1	0.1	0.1	0.1
Over 35	0.1	0.1	0.1	0.1
Race				
Black	0.2	0.2	0.2	0.2
Hispanic	0.3	0.3	0.3	0.3
Other	0.1	0.0	0.0	0.0
Marital Status				
Currently married	0.4	0.4	0.4	0.4
Previously married	0.1	0.1	0.1	0.1
Employment Status				
Employed	0.3	0.3	0.3	0.3
Employed full-time	0.1	0.1	0.1	0.1
Education				
Less than 12th grade	0.4	0.4	0.4	0.4
Some college	0.3	0.3	0.3	0.3
Currently in school	0.2	0.2	0.2	0.2
Household Characteristics				
No children	0.4	0.4	0.4	0.4
More than one child	0.3	0.3	0.3	0.3
Other adult	0.8	0.9	0.9	0.9
Receipt of AFDC and Food Stamp Benefits				
Any AFDC	0.2	0.2	0.2	0.2
Any Food Stamps	0.4	0.4	0.3	0.3

Exhibit D.3
(continued)

	Analytic Samples			
	Baseline Sample	Baseline Survey, Prenatal Survey, and Abstract	Baseline Survey, Postpartum Survey, and Abstract	All Surveys
Household Income				
Less than 50 percent of poverty	0.4	0.4	0.4	0.4
Greater than 130 percent of poverty	0.2	0.2	0.2	0.2
Pregnancy History				
Previous pregnancy	0.6	0.6	0.6	0.6
First trimester enrollee	0.4	0.4	0.4	0.4
Third trimester enrollee	0.1	0.1	0.1	0.1
No prenatal care	0.2	0.2	0.2	0.2
Previous WIC Experience				
Yes	0.4	0.4	0.4	0.4

Note: All values in exhibit represent means of dichotomous variables with, unless otherwise specified, values of zero for no and one for yes.

Exhibit D.4

Topics Covered in Observed Prenatal Nutrition Education Contacts: Southeast Sites

Topic	SOUTHEAST			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 8)	Follow-ups ¹ (n = 5)	Certifications (n = 8)	Follow-ups (n = 7)
<i>WIC foods</i>				
How to use WIC vouchers	8	1	7	0
Foods you can get with WIC vouchers	8	1	8	0
Supplemental nature of WIC food package				
Rationale for WIC foods (major nutrients)	8	1	8	3
<i>Prenatal Issues</i>				
Types and amounts of food to eat while pregnant	7	6	8	7
Importance of prenatal care	1	3	0	4
Recommended weight gain	7	4	8	7
Participant's relative rate of weight gain	6	6	1	4
Dealing with complications of pregnancy	5	4	1	3
Need to consult physician before taking over-the-counter medications	4	2	4	1
Effects of alcohol and drugs	2	2	8	6
Effects of smoking	3	2	8	6
Effects of caffeine	1	4	6	6
Importance of prenatal vitamin and mineral supplements	7	5	8	6
Iron: intake, food sources, absorption	7	5	8	6
Other issues ²	0	0	0	5

**Exhibit D.4
(continued)**

Topic	SOUTHEAST			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 8)	Follow-ups ¹ (n = 5)	Certifications (n = 8)	Follow-ups (n = 7)
<i>Breastfeeding</i>				
Benefits of breastfeeding	7	1	7	0
Importance of adequate fluids while breastfeeding	1	0	0	0
Dealing with common breastfeeding problems	1	0	5	0
Breastfeeding supports services ⁴	1	0	7	1
Breastfeeding techniques/positions	6	0	0	0
Combining breastfeeding and bottle feeding ³	7	0	7	0
Infant growth spurts and increased breastfeeding demand	1	0	0	0
Effects of alcohol, smoking, and other drugs on breastfed infant	0	0	1	0
Need to consult physician before taking over-the-counter medications	0	0	0	0
Infant feeding preference	5	1	7	1
Breastfeeding in the hospital	5	0	1	0
Other issues ⁵	0	0	1	0

¹Includes high-risk participants only. Low-risk participants receive newsletter in conjunction with voucher pick-up.

²Includes controlling appetite, dealing with allergies, increasing fluids, exercise, posture, and sodium intake.

³Includes returning to work/school, breast pumps, and nipple confusion

⁴Includes peer counseling, breastfeeding classes, lactation consultants, La Leche League, and other breastfeeding support services.

⁵Includes AIDS/HIV and contraindications for breastfeeding.

Exhibit D.5

Topics Covered in Prenatal Nutrition Education Contacts: Mountain Plains

Topic	MOUNTAIN PLAINS			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 8)	Follow-ups (n = 7)	Certifications (n = 8)	Follow-ups (n = 7)
<i>WIC foods</i>				
How to use WIC vouchers	8	7	7	2
Foods you can get with WIC vouchers	8	7	8	1
Supplemental nature of WIC food package	7	0	7	0
Rationale for WIC foods (major nutrients)	8	0	4	0
<i>Prenatal issues</i>				
Types and amounts of food to eat while pregnant	8	2	8	2
Importance of prenatal care	8	4	6	3
Recommended weight gain	8	3	8	4
Participant's relative rate of weight gain	0	5	8	7
Dealing with complications of pregnancy	8	2	8	1
Need to consult physician before taking over-the-counter medications	8	0	4	0
Effects of alcohol and drugs	8	4	8	0
Effects of smoking	8	5	8	2
Effects of caffeine	8	0	8	0
Importance of prenatal vitamin and mineral supplements	8	1	8	5
Iron: intake, food sources, absorption	8	0	3	0
Other issues ¹	0	0	0	1

Exhibit D.5
(continued)

Topic	MOUNTAIN PLAINS			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 8)	Follow-ups (n = 7)	Certifications (n = 8)	Follow-ups (n = 7)
<i>Breastfeeding</i>				
Benefits of breastfeeding	8	0	8	3
Importance of adequate fluids while breastfeeding	3	0	2	1
Dealing with common breastfeeding problems	6	0	5	5
Breastfeeding supports services ²	3	0	2	3
Breastfeeding techniques/positions	4	0	3	4
Combining breastfeeding and bottle feeding ³	4	0	6	6
Infant growth spurts and increased breastfeeding demand	0	0	2	2
Effects of alcohol, smoking, and other drugs on breastfed infant	2	0	6	1
Need to consult physician before taking over-the-counter medications	0	0	3	1
Infant feeding preference	8	4	8	6
Breastfeeding in the hospital	0	0	0	3
Other issues ⁴	0	0	0	0

¹Includes controlling appetite, dealing with allergies, increasing fluids, exercise, posture, and sodium intake.

²Includes peer counseling, breastfeeding classes, lactation consultants, La Leche League, and other breastfeeding support services.

³Includes returning to work/school, breast pumps, and nipple confusion.

⁴Includes AIDS/HIV and contraindications for breastfeeding.

Exhibit D.6

Topics Covered in Prenatal Nutrition Education Contacts: Midwest Sites

Topic	MIDWEST	
	Site 1	Site 2
	Number of Contacts in Which Topic Was Covered	
	Certifications (n = 8)	Certifications (n = 12)
<i>WIC foods</i>		
How to use WIC vouchers	5	12
Foods you can get with WIC vouchers	5	12
Supplemental nature of WIC food package	2	0
Rationale for WIC foods (major nutrients)	1	1
<i>Prenatal Issues</i>		
Types and amounts of food to eat while pregnant	8	11
Importance of prenatal care	6	9
Recommended weight gain	7	11
Participant's relative rate of weight gain	7	11
Dealing with complications of pregnancy	8	11
Need to consult physician before taking over-the-counter medications	7	4
Effects of alcohol and drugs	8	10
Effects of smoking	8	11
Effects of caffeine	4	8
Importance of prenatal vitamin and mineral supplements	8	8
Iron: intake, food sources, absorption	8	8
Other issues ¹	1	0

**Exhibit D.6
(continued)**

Topic	MIDWEST	
	Site 1	Site 2
	Number of Contacts in Which Topic Was Covered	
	Certifications (n = 8)	Certifications (n = 12)
<i>Breastfeeding</i>		
Benefits of breastfeeding	7	9
Importance of adequate fluids while breastfeeding	1	4
Dealing with common breastfeeding problems	0	2
Breastfeeding supports services ²	0	5
Breastfeeding techniques/positions	1	5
Combining breastfeeding and bottle feeding ³	1	8
Infant growth spurts and increased breastfeeding demand	0	1
Effects of alcohol, smoking, and other drugs on breastfed infant	1	0
Need to consult physician before taking over-the-counter medications	1	1
Infant feeding preference	7	11
Breastfeeding in the hospital	2	1
Other issues ⁴	1	0

Note: Data not reported for follow-up contacts because so few were observed (2 in Site 1 and 3 in Site 2).

¹Includes controlling appetite, dealing with allergies, increasing fluids, exercise, posture, and sodium intake.

²Includes peer counseling, breastfeeding classes, lactation consultants, La Leche League, and other breastfeeding support services.

³Includes returning to work/school, breast pumps, and nipple confusion.

⁴Includes AIDS/HIV and contraindications for breastfeeding.

Exhibit D.7

Topics Covered in Observed Postpartum Nutrition Education Contacts: Southeast Sites

Topic	SOUTHEAST			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 7)	Follow-ups (n = 0)	Certifications (n = 7)	Follow-ups (n = 4)
<i>WIC foods</i>				
How to use WIC vouchers	3	N/A	3	0
Foods you can get with WIC vouchers	3	N/A	5	0
Supplemental nature of WIC food package	3	N/A	3	0
Rationale for WIC foods (major nutrients)	1	N/A	5	0
<i>Maternal health and nutrition</i>				
Recommended healthy diet	6	N/A	4	0
Weight loss/weight control plan	1	N/A	3	0
Importance of postpartum check up with doctor	1	N/A	2	0
Smoking/effect of second-hand smoke on baby	0	N/A	3	0
Iron intake, absorption, and supplementation	4	N/A	4	0
Exercise/posture	0	N/A	2	0
Other issues ¹	0	N/A	1	0
<i>Infant feeding</i>				
Importance of iron-fortified formula	4	N/A	5	4
Introducing solid foods	4	N/A	5	4
Avoiding bottle caries ²	4	N/A	0	0

**Exhibit D.7
(continued)**

Topic	SOUTHEAST			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 7)	Follow-ups (n = 0)	Certifications (n = 7)	Follow-ups (n = 4)
<i>Infant feeding (continued)</i>				
Current infant feeding practices/ recommendations	4	N/A	5	4
Formula preparation and storage	4	N/A	5	4
Allergies/food intolerances	0	N/A	4	4
Infant's rate of growth	4	N/A	5	4
Infant/toddler growth and development	4	N/A	5	4
Immunizations/medical care	2	N/A	0	3
Prevention of lead poisoning	2	N/A	0	0
Shaken baby syndrome	4	N/A	0	0
Other issues ³	0	N/A	0	1
<i>Breastfeeding</i>				
Benefits of breastfeeding	5	N/A	2	1
Importance of adequate fluids while breastfeeding	1	N/A	0	0
Dealing with typical breastfeeding problems	1	N/A	1	0
Breastfeeding support services ⁴	1	N/A	1	0
Breastfeeding techniques/positions	5	N/A	0	0
Combining breastfeeding and bottle feeding ⁵	2	N/A	1	0
Infant growth spurts and increased breastfeeding demand	0	N/A	2	1

Exhibit D.7
(continued)

Topic	SOUTHEAST			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 7)	Follow-ups (n = 0)	Certifications (n = 7)	Follow-ups (n = 4)
<i>Breastfeeding</i> <i>(continued)</i>				
Effects of alcohol, smoking, caffeine, and other drugs on breastfed infant	0	N/A	2	1
Need to consult doctor before taking any over-the-counter medications	1	N/A	2	1
Other issues ⁶	0	N/A	0	0

¹Includes appetite, allergies, increasing fluids, sodium intake, and finishing up prenatal supplements.

²Includes introduction of cup and appropriate use of bottle.

³Includes medications, giving water to infants, fluoride sources, holding baby during feedings, making own baby foods, and information on bowel movements and other health risks.

⁴Includes peer counseling, breastfeeding classes, Lactation Consultants, La Leche League, and other breastfeeding support services.

⁵includes returning to work/school, breast pumps, and nipple confusion.

⁶Includes AIDS/HIV and contraindication of breastfeeding, weaning and nursing an older child.

Exhibit D.8

Topics Covered in Observed Postpartum Nutrition Education Contacts: Mountain Plains Sites

Topic	MOUNTAIN PLAINS			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 8)	Follow-ups (n = 7)	Certifications (n = 8)	Follow-ups (n = 7)
<i>WIC foods</i>				
How to use WIC vouchers	8	7	5	2
Foods you can get with WIC vouchers	7	7	7	3
Supplemental nature of WIC food package	0	1	4	1
Rationale for WIC foods (major nutrients)	1	0	3	0
<i>Maternal health and nutrition</i>				
Recommended healthy diet	5	1	7	3
Weight loss/weight control plan	5	1	8	2
Importance of postpartum check up with doctor	2	0	5	1
Smoking/effect of second-hand smoke on baby	5	0	8	1
Iron intake, absorption, and supplementation	3	0	7	1
Exercise/posture	0	0	1	0
Other issues ¹	0	0	1	0
<i>Infant feeding</i>				
Importance of iron-fortified formula	1	1	0	2
Introducing solid foods	5	1	6	3
Avoiding bottle caries ²	1	1	4	1

Exhibit D.8
(continued)

Topic	MOUNTAIN PLAINS			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 8)	Follow-ups (n = 7)	Certifications (n = 8)	Follow-ups (n = 7)
<i>Infant feeding</i> <i>(continued)</i>				
Current infant feeding practices/ recommendations	7	3	6	3
Formula preparation and storage	1	0	4	1
Allergies/food intolerances	0	0	0	0
Infant's rate of growth	6	3	6	2
Infant/toddler growth and development	5	3	1	1
Immunizations/medical care	0	0	0	0
Prevention of lead poisoning	0	0	0	0
Shaking baby syndrome	0	0	0	0
Other issues ³	0	0	1	0
<i>Breastfeeding</i>				
Benefits of breastfeeding	1	0	1	0
Importance of adequate fluids while breastfeeding	0	0	0	0
Dealing with typical breastfeeding problems	0	0	0	0
Breastfeeding support services ⁴	0	0	0	0
Breastfeeding techniques/positions	0	0	0	0
Combining breastfeeding and bottle feeding ⁵	0	0	0	0
Infant growth spurts and increased breastfeeding demand	0	0	0	0

**Exhibit D.8
(continued)**

Topic	MOUNTAIN PLAINS			
	Site 1		Site 2	
	Number of Contacts in Which Topic Was Covered			
	Certifications (n = 8)	Follow-ups (n = 7)	Certifications (n = 8)	Follow-ups (n = 7)
<i>Breastfeeding (continued)</i>				
Effects of alcohol, smoking, caffeine, and other drugs on breastfed infant	0	0	2	0
Need to consult doctor before taking any over-the-counter medications	0	0	0	0
Other issues ⁶	0	0	0	0

¹Includes appetite, allergies, increasing fluids, sodium intake, and finishing up prenatal supplements.

²Includes introduction of cup and appropriate use of bottle.

³Includes medications, giving water to infants, fluoride sources, holding baby during feedings, making own baby foods, and information on bowel movements and other health risks.

⁴Includes peer counseling, breastfeeding classes, Lactation Consultants, La Leche League, and other breastfeeding support services.

⁵Includes returning to work/school, breast pumps, and nipple confusion.

⁶Includes AIDS/HIV and contraindication of breastfeeding, weaning and nursing an older child.

Exhibit D.9

Topics Covered in Postpartum Nutrition Education Contacts: Midwest Sites

Topic	MIDWEST	
	Site 1	Site 2
	Number of Contacts in Which Topic Was Covered	
	Certifications (n = 6)	Certifications (n = 10)
<i>WIC foods</i>		
How to use WIC vouchers	4	10
Foods you can get with WIC vouchers	2	10
Supplemental nature of WIC food package	0	2
Rationale for WIC foods (major nutrients)	3	1
<i>Maternal health and nutrition</i>		
Recommended healthy diet	6	10
Weight loss/weight control plan	1	4
Importance of postpartum check up with doctor	0	4
Smoking/effect of second-hand smoke on baby	1	3
Iron intake, absorption, and supplementation	4	4
Exercise/posture	0	0
Other issues ¹	0	1
<i>Infant feeding</i>		
Importance of iron-fortified formula	3	6
Introducing solid foods	0	2
Avoiding bottle caries ²	0	0
Current infant feeding practices/recommendations	5	6
Formula preparation and storage	1	4
Allergies/food intolerances	1	6
Infant's rate of growth	2	4
Infant/toddler growth and development	0	1

Exhibit D.9
(continued)

Topic	MIDWEST	
	Site 1	Site 2
	Number of Contacts in Which Topic Was Covered	
	Certifications (n = 6)	Certifications (n = 10)
<i>Infant feeding</i> <i>(continued)</i>		
Immunizations/medical care	0	0
Prevention of lead poisoning	0	1
Shaking baby syndrome	0	1
Other issues ³		
<i>Breastfeeding</i>		
Benefits of breastfeeding	1	0
Importance of adequate fluids while breastfeeding		0
Dealing with typical breastfeeding problems	0	0
Breastfeeding support services ⁴	1	0
Breastfeeding techniques/positions	0	0
Combining breastfeeding and bottle feeding ⁵	2	0
Infant growth spurts and increased breastfeeding demand	0	0
Effects of alcohol, smoking, caffeine, and other drugs on breastfed infant	0	0
Need to consult doctor before taking any over-the-counter medications	0	0
Other issues ⁶	0	0

Note: Data not reported for follow-up contacts because so few were observed (2 in Site 1 and 3 in Site 2).

¹Includes appetite, allergies, increasing fluids, sodium intake, and finishing up prenatal supplements.

²Includes introduction of cup and appropriate use of bottle.

³Includes medications, giving water to infants, fluoride sources, holding baby during feedings, making own baby foods, and information on bowel movements and other health risks.

⁴Includes peer counseling, breastfeeding classes, Lactation Consultants, La Leche League, and other breastfeeding support services.

⁵Includes returning to work/school, breast pumps, and nipple confusion.

⁶Includes AIDS/HIV and contraindication of breastfeeding, weaning and nursing an older child.

Exhibit D.10

Participant Reports of Information and Advice Received from WIC Staff: Southeast Sites

Topic	SOUTHEAST			
	Site 1		Site 2	
	Prenatal (n = 324)	Postpartum ¹ (n = 301)	Prenatal (n = 329)	Postpartum ¹ (n = 344)
<i>WIC Foods</i>				
How to use WIC vouchers	91.7%	98.3%	95.4%	96.5%
Foods you can get with WIC vouchers	94.8	98.0	93.9	97.3
<i>Prenatal Issues</i>				
Types and amounts of food to eat while pregnant	94.4	97.4	85.7	96.5
How to get more halite in your diet ²	88.9	96.0	24.3	46.5
Importance of prenatal care	88.3	N/A	83.9	N/A
Weight gain during pregnancy	89.8	N/A	70.2	N/A
Dealing with complications of pregnancy ³	76.9	N/A	54.1	N/A
Need to consult physician before taking over-the-counter medications	81.5	N/A	78.7	N/A
Effects of alcohol, smoking, caffeine and other drugs	86.4	N/A	87.8	N/A
Importance of prenatal vitamin and iron pills	87.7	N/A	83.9	N/A
Chewing gums to avoid while pregnant ²	36.1	N/A	5.5	N/A
<i>Breastfeeding/Infant Feeding</i>				
Benefits of breastfeeding	86.7	N/A	89.4	N/A
Importance of adequate fluids while breastfeeding	72.8	93.7	58.4	83.5
Importance of glucose intake while breastfeeding ²	56.8	88.8	28.9	61.6
Dealing with typical breastfeeding problems ⁴	54.6	87.3	49.5	76.8
Importance of iron-fortified formula	61.4	90.8	71.8	91.1
Introducing solid foods	48.8	88.2	51.7	85.4
Avoiding bottle caries	58.3	91.1	66.9	90.8
Breastfeeding support services	46.0	81.8	83.9	93.0
Other issues	3.4	4.0	1.8	8.4

N/A = Topics included in prenatal survey only.

¹May includes information received any time between certification and four-to-six months postpartum.

²"Nonsense" item inserted to get some idea of how carefully respondents answered questions.

³Issues such as nausea, vomiting, heartburn and constipation.

⁴Issues such as sore nipples, infants who won't latch on, and planning breastfeeding around normal daily activities.

Exhibit D.11

Participant Reports of Information and Advice Received from WIC Staff: Mountain Plains Sites

Topic	MOUNTAIN PLAINS			
	Site 1		Site 2	
	Prenatal (n = 333)	Postpartum ¹ (n = 310)	Prenatal (n = 237)	Postpartum ¹ (n = 218)
<i>WIC Foods</i>				
How to use WIC vouchers	98.8%	99.7%	94.1%	98.0%
Foods you can get with WIC vouchers	99.7	100.0	97.9	100.0
<i>Prenatal Issues</i>				
Types and amounts of food to eat while pregnant	96.1	98.6	96.2	98.8
How to get more halite in your diet ²	35.4	46.1	24.1	42.6
Importance of prenatal care	86.8	N/A	89.9	N/A
Weight gain during pregnancy	92.5	N/A	92.8	N/A
Dealing with complications of pregnancy ³	74.8	N/A	66.7	N/A
Need to consult physician before taking over-the-counter medications	79.0	N/A	82.7	N/A
Effects of alcohol, smoking, caffeine and other drugs	88.0	N/A	92.4	N/A
Importance of prenatal vitamin and iron pills	87.1	N/A	85.7	N/A
Chewing gums to avoid while pregnant ²	9.0	N/A	7.2	N/A
<i>Breastfeeding/Infant Feeding</i>				
Benefits of breastfeeding	94.0	N/A	94.9	N/A
Importance of adequate fluids while breastfeeding	71.5	86.8	74.7	90.0
Importance of glucose intake while breastfeeding ²	36.0	54.2	40.5	59.4
Dealing with typical breastfeeding problems ⁴	51.7	71.6	70.5	84.7
Importance of iron-fortified formula	62.5	81.4	61.2	85.9
Introducing solid foods	39.0	69.3	40.5	77.5
Avoiding bottle caries	61.3	85.7	73.4	90.8
Breastfeeding support services	52.2	71.4	59.1	80.7
Other issues	3.3	11.5	3.4	12.4

N/A = Topics included in prenatal survey only.

¹May includes information received any time between certification and four-to-six months postpartum.

²"Nonsense" item inserted to get some idea of how carefully respondents answered questions.

³Issues such as nausea, vomiting, heartburn and constipation.

⁴Issues such as sore nipples, infants who won't latch on, and planning breastfeeding around normal daily activities.

Exhibit D.12

Participant Reports of Information and Advice Received from WIC Staff: Midwest Sites

Topic	MIDWEST			
	Site 1		Site 2	
	Prenatal (n = 216)	Postpartum ¹ (n = 216)	Prenatal (n = 233)	Postpartum ¹ (n = 239)
<i>WIC Foods</i>				
How to use WIC vouchers	92.6%	97.6%	92.7%	96.8%
Foods you can get with WIC vouchers	93.5	97.6	93.6	98.4
<i>Prenatal Issues</i>				
Types and amounts of food to eat while pregnant	88.9	96.4	87.6	97.2
How to get more halite in your diet ²	23.2	30.2	26.2	42.5
Importance of prenatal care	88.0	N/A	88.0	N/A
Weight gain during pregnancy	69.0	N/A	67.8	N/A
Dealing with complications of pregnancy ³	58.8	N/A	55.8	N/A
Need to consult physician before taking over-the-counter medications	75.9	N/A	79.4	N/A
Effects of alcohol, smoking, caffeine and other drugs	88.4	N/A	88.4	N/A
Importance of prenatal vitamin and iron pills	83.8	N/A	81.1	N/A
Chewing gums to avoid while pregnant ²	6.9	N/A	4.3	N/A
<i>Breastfeeding/Infant Feeding</i>				
Benefits of breastfeeding	87.5	N/A	90.1	N/A
Importance of adequate fluids while breastfeeding	60.2	73.8	61.4	78.6
Importance of glucose intake while breastfeeding ⁴	35.7	49.6	39.1	61.1
Dealing with typical breastfeeding problems ⁵	44.4	59.5	47.6	67.1
Importance of iron-fortified formula	65.7	88.1	47.2	84.5
Introducing solid foods	45.8	72.6	26.2	66.3
Avoiding bottle caries	68.5	89.3	60.1	92.5
Breastfeeding support services	60.7	67.1	77.7	90.1
Other issues	6.5	11.5	3.9	7.1

N/A = Topics included in prenatal survey only.

¹May includes information received any time between certification and four-to-six months postpartum.

²"Nonsense" item inserted to get some idea of how carefully respondents answered questions.

³Issues such as nausea, vomiting, heartburn and constipation.

⁴Issues such as sore nipples, infants who won't latch on, and planning breastfeeding around normal daily activities.

Exhibit D.13

Participant Reports of Knowledge Gained from WIC Program

Knowledge gained from WIC	SOUTHEAST				MOUNTAIN PLAINS				MIDWEST	
	Site 1		Site 2		Site 1		Site 2		Site 1	Site 2
	(n = 324)	(n = 329)	(n = 333)	(n = 310)	(n = 216)	(n = 216)	(n = 216)	(n = 216)	(n = 216)	(n = 216)
Prenatal Survey										
Healthy eating during pregnancy	26.2%	16.1%	30.6%	28.3%	18.5%	18.5%	18.5%	18.5%	18.5%	9.9%
Breastfeeding	8.3	17.0	10.8	23.2	14.3	14.3	14.3	14.3	14.3	12.4
Feeding infants/children	7.7	2.1	3.0	5.5	5.6	5.6	5.6	5.6	5.6	5.1
Infant care/health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Healthy practices during pregnancy	2.2	2.4	5.1	0.4	2.8	2.8	2.8	2.8	2.8	1.3
Food sources for specific nutrient(s)	0.3	2.4	1.2	0.4	1.4	1.4	1.4	1.4	1.4	2.6
How WIC works (vouchers, etc.)	1.5	2.4	1.2	1.3	3.2	3.2	3.2	3.2	3.2	2.6
Where to get needed services	0.0	0.0	0.0	0.4	1.9	1.9	1.9	1.9	1.9	2.1
Other	0.4	2.1	0.6	3.4	3.2	3.2	3.2	3.2	3.2	3.8
Postpartum Survey										
Healthy eating during pregnancy	(n = 301) 29.6%	(n = 344) 18.0%	(n = 237) 31.0%	(n = 218) 22.0%	(n = 233) 19.4%	(n = 233) 19.4%	(n = 233) 19.4%	(n = 233) 19.4%	(n = 233) 19.4%	(n = 239) 14.2%
Breastfeeding	6.3	14.2	10.0	14.7	11.1	11.1	11.1	11.1	11.1	13.0
Feeding infants/children	29.6	9.3	10.7	14.7	6.5	6.5	6.5	6.5	6.5	12.6
Infant care/health	12.3	1.7	2.9	1.8	0.9	0.9	0.9	0.9	0.9	3.3
Healthy practices during pregnancy	0.7	0.9	2.6	1.4	0.0	0.0	0.0	0.0	0.0	0.4
Food sources for specific nutrient(s)	0.3	4.1	1.0	1.8	1.9	1.9	1.9	1.9	1.9	1.3
How WIC works (vouchers, etc.)	1.0	1.4	1.6	0.5	0.4	0.4	0.4	0.4	0.4	1.3
Where to get needed services	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0
Other	1.3	2.3	1.9	2.8	4.2	4.2	4.2	4.2	4.2	1.7

Note: Items listed reflect topic areas mentioned by two percent or more of respondents in any site in either prenatal or postpartum surveys.

Exhibit D.14

Participant Suggestions for Nutrition Education Improvement

Suggestion	SOUTHEAST		MOUNTAIN PLAINS		MIDWEST	
	Site 1	Site 2	Site 1	Site 2	Site 1	Site 2
Prenatal Survey						
None	(n = 324) 95.7%	(n = 329) 90.6%	(n = 333) 87.1%	(n = 310) 88.2%	(n = 216) 88.4%	(n = 216) 85.0%
Improve content or delivery	1.9	4.9	7.5	3.0	2.8	1.7
More personal contact	0.9	4.0	2.7	4.6	2.8	1.7
Increase awareness/opportunities	0.6	1.2	1.2	0.4	2.3	3.0
More/different written materials	0.0	0.3	3.0	2.1	2.3	3.4
Other	1.5	3.0	3.0	1.7	1.4	1.3
Postpartum Survey						
None	(n = 301) 96.7%	(n = 344) 88.7%	(n = 237) 84.2%	(n = 218) 89.0%	(n = 233) 86.6%	(n = 239) 81.2%
Improve content or delivery	2.0	7.0	9.4	6.0	5.6	5.9
More personal contact	0.0	2.0	1.9	0.0	0.9	2.5
Increase awareness/opportunities	1.0	0.6	1.9	0.0	2.8	1.7
More/different written materials	0.0	0.6	2.9	3.2	4.6	4.6
Other	1.0	4.7	3.5	1.8	0.5	5.4

Note: Percentages may not sum to 100 because respondents could make more than one suggestion.

Exhibit D.15

Satisfaction with WIC Experiences

SOUTHEAST	Site 1		Site 2	
	Prenatal Survey (n=324)	Postpartum Survey (n=301)	Prenatal Survey (n=329)	Postpartum Survey (n=344)
The staff was helpful				
Strongly agree	14.8%	12.6%	26.4%	33.1%
Agree	79.6	84.7	67.5	63.1
The staff made me wait too long				
Disagree	2.5	0.3	7.0	7.3
Strongly disagree	79.3	84.0	62.0	55.8
I was respected as an individual				
Strongly agree	9.3	7.6	14.9	19.8
Agree	86.7	90.7	78.1	73.2
Things were explained in a way I could understand				
Strongly agree	6.2	9.6	20.7	22.4
Agree	86.4	88.4	76.6	75.9
The staff was warm and friendly				
Strongly agree	9.9	7.0	21.3	19.9
Agree	83.3	89.7	69.9	71.5
My questions were answered				
Strongly agree	5.6	6.3	17.9	17.1
Agree	87.7	91.4	79.0	81.1
I felt satisfied when I left the WIC clinic				
Strongly agree	6.8	6.3	19.2	17.1
Agree	86.1	91.0	75.7	75.9
I felt confused when I left the WIC clinic				
Disagree	4.3	1.3	26.4	26.2
Strongly disagree	79.6	91.4	69.0	70.1
Some of the advice I received contradicted what my doctor told me				
Disagree	3.7	0.0	8.2	4.4
Strongly disagree	76.8	75.8	76.6	71.8
The counselors helped me decide how to feed my baby				
Strongly agree	3.4	2.0	4.3	4.9
Agree	60.8	83.1	33.4	38.7
The information was tailored to my individual needs				
Strongly agree	5.9	4.0	4.6	2.9
Agree	77.5	93.0	74.5	81.7
The information was helpful				
Strongly agree	5.9	7.0	12.5	11.9
Agree	89.2	90.7	83.9	86.0

Exhibit D.15
(continued)

MOUNTAIN PLAINS	Site 1		Site 2	
	Prenatal Survey (n=333)	Postpartum Survey (n=237)	Prenatal Survey (n=310)	Postpartum Survey (n=218)
The staff was helpful				
Strongly agree	32.1%	34.9%	45.2%	38.1%
Agree	66.4	63.2	53.6	61.5
The staff made me wait too long				
Strongly disagree	14.7	14.5	17.7	18.8
Disagree	76.6	74.8	76.8	70.6
I was respected as an individual				
Strongly agree	30.3	31.9	38.8	30.3
Agree	69.1	64.8	59.9	67.4
Things were explained in a way I could understand				
Strongly agree	30.0	30.6	40.9	31.2
Agree	68.2	68.1	58.2	68.8
The staff was warm and friendly				
Strongly agree	30.3	23.6	37.1	29.8
Agree	67.6	72.3	61.2	66.5
My questions were answered				
Strongly agree	25.2	26.1	32.5	25.7
Agree	73.3	71.6	67.1	72.9
I felt satisfied when I left the WIC clinic				
Strongly agree	27.9	28.4	33.3	30.7
Agree	68.5	68.1	65.0	66.0
I felt confused when I left the WIC clinic				
Strongly disagree	26.1	26.8	30.4	27.5
Disagree	69.7	69.0	67.5	70.2
Some of the advice I received contradicted what my doctor told me				
Strongly disagree	12.3	11.0	11.0	9.2
Disagree	71.2	61.9	66.2	54.6
The counselors helped me decide how to feed my baby				
Strongly agree	3.9	5.2	8.4	4.6
Agree	30.6	36.1	40.1	54.6
The information was tailored to my individual needs				
Strongly agree	7.8	11.3	14.4	10.6
Agree	76.0	75.6	76.4	77.5
The information was helpful				
Strongly agree	15.3	17.1	24.9	16.5
Agree	83.2	79.7	73.8	82.6

**Exhibit D.15
(continued)**

MIDWEST	Site 1		Site 2	
	Prenatal Survey (n=216)	Postpartum Survey (n=233)	Prenatal Survey (n=216)	Postpartum Survey (n=239)
The staff was helpful				
Strongly agree	36.6%	42.6%	28.3%	38.9%
Agree	61.6	54.2	68.7	60.2
The staff made me wait too long				
Strongly disagree	20.4	16.7	9.4	9.6
Disagree	71.3	70.8	76.4	69.5
I was respected as an individual				
Strongly agree	30.1	34.7	22.8	28.9
Agree	68.1	61.6	74.3	68.6
Things were explained in a way I could understand				
Strongly agree	33.3	33.3	26.6	29.7
Agree	65.7	64.3	70.0	68.2
The staff was warm and friendly				
Strongly agree	33.3	36.1	23.6	27.2
Agree	66.7	60.2	72.5	67.8
My questions were answered				
Strongly agree	28.2	34.7	20.2	24.7
Agree	70.4	62.0	78.1	74.5
I felt satisfied when I left the WIC clinic				
Strongly agree	31.5	36.1	24.5	25.5
Agree	65.7	59.7	72.1	71.1
I felt confused when I left the WIC clinic				
Strongly disagree	36.1	30.6	22.8	22.6
Disagree	61.1	66.7	74.2	75.7
Some of the advice I received contradicted what my doctor told me				
Strongly disagree	14.4	8.3	7.3	5.4
Disagree	70.8	55.6	69.1	47.7
The counselors helped me decide how to feed my baby				
Strongly agree	4.2	6.9	3.9	3.8
Agree	32.4	42.6	22.3	32.2
The information was tailored to my individual needs				
Strongly agree	10.7	13.4	9.4	9.6
Agree	74.5	75.5	78.1	83.7
The information was helpful				
Strongly agree	22.7	29.2	15.0	15.9
Agree	73.2	66.8	82.8	81.2

Exhibit D.16**Factor Loadings for Individual Satisfaction Statements**

Statement	Factor Load	
	Prenatal Survey	Postpartum Survey
The staff was helpful	.66	.64
The staff made me wait too long	-.34	-.35
I was respected as an individual	.70	.75
Things were explained in a way I could understand	.76	.76
The staff was warm and friendly	.79	.77
My questions were answered	.82	.84
I felt satisfied when I left the WIC clinic	.80	.87
I felt confused when I left the WIC clinic	-.51	-.56
Some advice I received was different than my Dr's	-.21	-.14
The counselors helped me decide how to feed my baby	.13	.18
The information was tailored to my needs	.49	.50
The information was helpful	.60	.65

Exhibit D.17

Regression Coefficients for Model of Satisfaction as a Function of WIC Nutrition Education Experiences: Prenatal Survey

Statement of WIC Experience	Coefficient	Std. Error
Counselors helped me decide how to feed baby ¹	0.37**	0.03
Staff did not make wait too long ²	0.19**	0.02
Advice was not different from advice given by physician ³	0.17**	0.02
Thought written material was useful	0.18**	0.04
Did not read/receive written materials	0.06	0.06
Had no outstanding issues to discuss	0.15**	0.03
Was not referred to other programs/services	-0.06**	0.02
Met one-on-one with nutritionist	-0.01	0.01
Met one-on-one with other WIC staff	0.05**	0.01
Did not learn anything from WIC	-0.03**	0.01
No longer receiving WIC benefits	-0.00	0.04

¹Strongly agree with statement.

²Strongly disagree with statement: "The staff made me wait too long."

³Strongly disagree with statement: "Some of the advice I received from WIC was different than the advice my doctor gave me."

*Statistically significant at the .05 percent level.

**Statistically significant at the .01 percent level.

Exhibit D.18

Regression Coefficients for Model of Satisfaction as a Function of WIC Nutrition Education Experiences: Postpartum Survey

Statement of WIC Experience	Coefficient	Std. Error
Counselors helped me decide how to feed baby ¹	0.39**	0.03
Staff did not make wait too long ²	0.27**	0.02
Advice was not different from advice given by physician ³	0.16**	0.03
Thought written material was useful	0.21**	0.04
Did not read/receive written materials	0.06	0.05
Had no outstanding issues to discuss	0.09**	0.02
Was not referred to other programs/services	-0.04*	0.02
Met one-on-one with nutritionist	-0.03*	0.01
Met one-on-one with other WIC staff	0.03*	0.01
Did not learn anything from WIC	-0.03**	0.01
No longer receiving WIC benefits	-0.01	0.02

¹Strongly agree with statement.

²Strongly disagree with statement: "The staff made me wait too long."

³Strongly disagree with statement: "Some of the advice I received from WIC was different than the advice my doctor gave me."

*Statistically significant at the .05 percent level.

**Statistically significant at the .01 percent level.



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