

## Barrier Analysis of Infant & Young Child Feeding and Maternal Nutrition Behaviors among IDPs in Northern and Southern Syria



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## Abbreviations and Acronyms

BA	Barrier Analysis
CHW	Community Health Workers
EBF	Exclusive Breastfeeding
IDP	Internally Displaced Person
INGO	International Non-Governmental Organization
IYCF	Infant and Young Child Feeding
PLW	Pregnant & Lactating Women
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
NFSL	Nutrition, Food Security & Livelihoods
SBC	Social Behavior Change
Tech RRT	Technical Rapid Response Team
UNICEF	The United Nations Children's Fund
USAID	U.S. Agency for International Development
WASH	Water, Sanitation and Hygiene
WFP	World Food Program

## Executive Summary

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This Barrier Analysis (BA) assessment represents the first to ever be conducted in Syria. The assessment was requested by UNICEF in hopes that the findings could strengthen the programming efforts of the entire Nutrition Cluster in Syria. Assessments were conducted in Northern and Southern Syria to examine the determinants of three key infant and young child feeding (IYCF) and maternal nutrition behaviors that have been promoted among internally displaced people (IDP) in camp and urban settings in the Aleppo, Idlib and Dar'a Governorates, but have not shown any significant improvement: 1) exclusive breastfeeding, (2) ensuring minimum dietary diversity during complementary feeding, and (3) eating an extra meal during pregnancy. Nutrition Cluster partner organizations in Gaziantep were invited to undergo capacity building in the Barrier Analysis methodology and conduct three Barrier Analysis assessments to lend evidence to inform program activity design and advocacy.

*Methodology.* The Barrier Analysis methodology, as specified in *A Practical Guide to Conducting a Barrier Analysis (2013)*, was closely followed.<sup>1</sup> For each behavior studied, at least 45 “Doers” and 45 “Non-Doers” were sampled, and one-on-one interviews were conducted with each participant. Survey responses for open-ended questions were coded as a group, and all responses were analyzed for statistically significant differences between Doers and Non-Doers. The BA assessment team conducted initial interpretation of findings, and drafted “Bridges to Activities” and recommendations. A results workshop was then held with participating partners, and later with Cluster partners, to help inform interpretation of results and recommendations based on findings.

*Results and Recommendations.* The BA’s identified key factors that explain the differences between mothers of children (ages 0- 6 months) who exclusively breastfeed (EBF), mothers of children (ages 6- 23 months) who feed them meals containing foods from at least 4 of the 7 food groups each day, and pregnant mothers who ate an extra meal a day during pregnancy. Specifically, 11 determinants in the North and 5 determinants in the South were found to be significant for EBF, 11 determinants in the North and 8 determinants in the South for complementary feeding, and 11 determinants in the North and 9 determinants in the South for an extra meal during pregnancy.

For exclusive breastfeeding, barriers experienced by Non- Doers include stress of the mother, the perception that the baby is not satisfied and needs more milk, the mother has anemia, physical issues with breastfeeding for both the mother (breast problems) and baby (stomach problems, colic, teething) and lack of support from the husband. Mother’s and mother-in-law’s were stated by Non- Doers as people that disapprove of EBF. Additional significant determinants include perceived positive and negative consequences, perceived access, perceived cues for action/ reminders, perceived risk, perceived severity, perceived action efficacy, divine will and culture.

For minimum dietary diversity, barriers for Non- Doers include not enough time for Mother’s to prepare food because she is working outside the house, the child does not accept the prepared food, if the child is

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<sup>1</sup> Kittle Bonnie. 2013. *A Practical Guide to Conducting a Barrier Analysis*. New York, NY: Helen Keller International

sick or has thyroid issues, lack of diversity of market foods, and not being able to afford diverse foods. Non-Doers indicated that sisters and aunts disapprove of feeding a diverse diet to children. Additional significant determinants include perceived positive and negative consequences, perceived access, perceived cues for action/ reminders, perceived risk, perceived severity, perceived action efficacy, divine will and culture.

For extra meal during pregnancy, barriers for Non- Doers include barriers such as pregnancy- related sickness (vomiting, pressure, stomach pain), markets being far away, lack of money to buy foods, no privacy, not having enough time to cook food, not receiving NGO food baskets and regular displacement. Non-Doers indicated that no one would disapprove of eating an extra meal. Additional significant determinants include perceived positive and negative consequences, perceived access, perceived cues for action/ reminders, perceived risk, perceived severity, perceived action efficacy, divine will and culture.

This report details these significant determinants for each behaviors and provides recommendations on how evidence from these assessments should be used to inform activity planning by Nutrition Cluster partner programs in northern and southern Syria. Recommendations include integration with other Technical Sectors and Clusters, expansion of coverage of food basket distribution, establishing food vouchers and community/ home gardens, tailoring messages according to findings, expansion of mother support or care group coverage, improving counseling using recommended topics, and increasing involvement of husbands and other influential groups in order to increase their support of Mother's in practicing behaviors.

## Introduction

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The Syrian Crisis continues to be one of the worst humanitarian and protection crisis of our time. As the Crisis continues in its sixth year, the ongoing conflict has taken a significant toll on the lives of the Syrian people, having led to extensive displacement of over half of the population, with 4.8 million seeking refuge in neighboring countries and 6.3 million people having been internally displaced. About 13.5 million people within Syria require urgent humanitarian assistance, this includes 1 million in camps/ shelters and 4.5 million people that are living in besieged and hard-to-reach areas.<sup>2,3</sup> The conflict has impacted the basic needs of the population, such as nutrition, health, and access to safe water, sanitation and hygiene. Of those requiring assistance, 7 million are unable to obtain the basic food required to meet their nutritional needs.<sup>4</sup>

After months of intense conflict in the Northern Governorate of Aleppo, a ceasefire was declared in January 2017. However, fighting still continues in the Governorate of Idlib. The impact of the heavy-fighting in the North has been the mass displacement of tens of thousands of people. This displacement has led to

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<sup>2</sup> Humanitarian Response Plan Syria 2017 [https://docs.unocha.org/sites/dms/Documents/2017\\_hrp\\_syria\\_170320\\_ds.pdf](https://docs.unocha.org/sites/dms/Documents/2017_hrp_syria_170320_ds.pdf)

<sup>3</sup> UNOCHA <http://www.unocha.org/country/syrian-arab-republic/syria-country-profile/about-crisis>

<sup>4</sup> OCHA 2016 Dashboard

challenges for host communities, including tension over access to services, as well as families living in desperate conditions. <sup>2</sup> As frontlines shifted, many IDPs were forced to move multiple times in search of safety, and as their financial resources became depleted, many families were forced into poor quality and over-crowded accommodations. Moreover, many families are living in camps, informal settlements and collective centers located throughout the country. In 2017, the nutrition sector response priorities focused on humanitarian lifesaving curative and preventative interventions. The Nutrition Cluster targeted 328,084 children 6-59 months and 199,308 PLW for curative and preventive interventions, of which 183,988 children and 84,107 pregnant and lactating women (PLWs) were in Idlib. Nutrition Cluster partners and NGO's provided nutrition interventions in Aleppo and in 181 communities in Idlib. Efforts were made to ensure equitable access, large scale preventative services related to infant and young child feeding (IYCF) in emergencies, as well as micronutrient supplementation for women and children at community and health facility level.

The Southern Governorate of Dar'a also endured heavy bombardment until the recent ceasefire in July. The aerial bombardment and ground clashes in this region led to repeated mass displacements of the population. IDPs faced significant challenges in accessing food due to the high cost and shortage of available food. This was further impacted by the rise in prices of cooking gasoline, leading to most IDPs consuming only 2 meals a day.<sup>5</sup> In response to this massive food security issue, several NGO's began distributing food baskets to IDP families, however this distribution has been restricted to the most vulnerable families.

While there are gaps in nutrition data in Syria, the overall nutritional status of women and children was poor even before the Crisis began. There was an estimated prevalence of 23% stunting, 9.3% wasting, 10.3% underweight and 29.2% anemia among children 0-59 months of age. Only about 42% of infants were exclusively breastfed and 42.2% of newborns initiated breastfeeding within the first hour of birth. <sup>6, 7</sup> Currently, it is estimated that 4.4 million children aged 6-59 months and PLWs are in need of preventive and curative nutrition services. Of these, an estimated 75,000 children aged 6-59 months are acutely malnourished, 840,000 children suffer from micronutrient deficiencies, and 1.5 million PLWs require preventive and curative nutrition services against under-nutrition and for optimal nutrition well-being. <sup>2</sup>

Despite these immense challenges, humanitarian partners continue to deliver immediate lifesaving assistance to conflict-affected communities. The primary objective of the Nutrition Cluster and its partners is to promote and support optimal infant and young child feeding (IYCF) practices, as well as maternal nutrition, as priority lifesaving interventions in Syria. This is especially critical given that during emergencies and mass displacements, it is common for IYCF and maternal nutrition practices to fall to sub-optimum levels, resulting in for example non- exclusive breastfeeding, increased use of infant formula in situations of poor sanitation, reduced dietary diversity in prepared meals and reduced frequency of daily meals

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<sup>5</sup> Life Line Aurantis. Dar'a City: Humanitarian & Field Situation Update 16 February 2017

<sup>6</sup> Syria Family Health Survey 2009

<sup>7</sup> MOH, nutrition surveillance system report 2011



during pregnancy.<sup>8</sup> Moreover, displacement of populations leads to food insecurity and the increased susceptibility of diarrhea and other childhood diseases, which can further exacerbate nutritional status.<sup>2</sup>

During 2016, the Whole of Syria Nutrition Sector (WoS) response reached 3.4 million children and PLW beneficiaries.<sup>9</sup> This nutrition response mechanism, coordinated from Damascus, Gaziantep and Amman, provided preventative and therapeutic nutrition interventions, such as: IYCF-E messages and counselling, malnutrition screening, SAM and MAM treatment, micronutrient supplementation, provision of food assistance and non-food items, and training of health staff on IYCF and CMAM guidelines.<sup>10</sup> To harmonize their programming efforts in Syria, a Nutrition Cluster IYCF Strategy was developed for partners, however this led to the need for a more in-depth understanding of IYCF practices in Syria. A Knowledge Attitudes and Practices (KAP) survey was conducted in February 2017, researching key IYCF and maternal nutrition indicators. The results of the KAP indicated that despite the extensive programming in Syria by Cluster Partners, the prevalence of certain IYCF behaviors were either low or largely unchanged. Three behaviors in particular stood out as needing further investigation: 1) exclusive breastfeeding (30.9%), 2) complementary feeding for minimum dietary diversity (57.3%), and (3) eating an extra meal during pregnancy (40.3%). In response to these results, the Nutrition Cluster requested that a Barrier Analysis assessment be conducted to determine the reasons behind the continued poor IYCF and maternal nutrition practices to lend evidence to more tailored Partner program activities in Northern and Southern Syria as a means of improving behavior change efforts.

## Methodology

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A Barrier Analysis (BA) is a rapid assessment tool used to identify the barriers that are preventing a target group from adopting a preferred behavior, as well as identifying the facilitators or motivators to adopting the behavior. The BA approach is based mainly on the Health Belief Model and the Theory of Reasoned Action, and explores up to 12 recognized behavioral determinants. The approach involves a cross-sectional survey, carried out among a sample of 45 “Doers” (those who practice the behavior) and 45 “Non-Doers” (those who do not), for a total of 90 participants per BA. Individuals are screened and classified according to whether they are Doers or Non-Doers, and then asked questions according to their classification. Syrian mothers who should be practicing the behaviors in question were interviewed in order to identify which of the 12 determinants of behavior change are preventing Non-Doers in this population from adopting the behavior, as well as which determinants are facilitating adoption of behaviors among Doers.

### Behavior Definition

Three key behaviors were identified to be assessed. These behaviors were selected because they are promoted through Cluster partner programs among internally displaced persons (IDPs) in camp or urban

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<sup>8</sup> Nutrition Cluster IYCF-E Operational Strategy 2017- 2020

<sup>9</sup> Whole of Syria (WoS) nutrition Sector Bulletin, Issue 2 July- December 2016

<sup>10</sup> OCHA Turkey/Syria: Cross-Border Humanitarian Reach and Activities from Turkey July 2017

contexts in north and south Syria but have yet to experience significant improvement (according to recent assessments and program data):

➤ **Behavior 1: Mothers of children (ages 0- 6 months) exclusively breastfeed**

To assess this behavior, mothers with children aged 5-12 months were interviewed. This behavior definition was relaxed to “0-5 months”, according to BA methodology, to increase the sampling pool and ensure the ability to meet sample size requirements. UNICEF and WHO recommend that children are given only breastmilk during the first 6 months of life. Exclusive breastfeeding (EBF) is recommended because breast milk is uncontaminated, contains all the necessary nutrients for the first few months of life, and provides immunity to disease through maternal antibodies, among other benefits.

➤ **Behavior 2: Mothers of children 6 – 23 months feed a diverse diet to their children containing foods from at least 4 of the 7 food groups per day**

To assess this behavior, mothers with children aged 9-23 months were interviewed. Mothers with children 9 months of age, instead of 6 months, were interviewed in order to ensure a sample size of mothers who had enough time to gain more experience in the recommended practice. Complementary feeding is the transition from exclusive breastfeeding to solid or semi-solid food covering the period from 6-24 months. To meet evolving nutritional requirements of the developing child during this period, minimum dietary diversity requires children receive foods from 4 or more of the 7 food groups (1. Grains, roots and tubers; 2. Legumes and nuts; 3. Dairy products; 4. Flesh foods; 5. Eggs; 6. Vitamin-A-rich fruits and vegetables; 7. Other fruits and vegetables). Dietary diversity is positively associated with mean micronutrient density adequacy and nutritional status.<sup>11,12,13</sup>

➤ **Behavior 3: Pregnant women consume an additional meal daily during pregnancy**

To assess this behavior, pregnant women were interviewed. Mothers who were aware of their pregnancy for at least a month were interviewed in order to ensure a sample size of women who had enough time to gain more experience in the recommended practice. Pregnant women are recommended to consume an additional 200-300 kcal per day. Recommendations are based on pre-pregnancy weight, however individual energy requirements may vary.<sup>14</sup>

## **BA Questionnaire Development**

Three barrier analysis questionnaires were developed in English following the standard BA questionnaire design guidelines and reviewed by a BA expert. These questionnaires were then translated into Arabic by

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<sup>11</sup> UNICEF & WHO Indicators for assessing infant and young child feeding practices.

[http://www.unicef.org/nutrition/files/IYCF\\_Indicators\\_part\\_III\\_country\\_profiles.pdf](http://www.unicef.org/nutrition/files/IYCF_Indicators_part_III_country_profiles.pdf)

<sup>12</sup> Nutrition Requirements, British Nutrition Foundation

[https://www.nutrition.org.uk/attachments/article/234/Nutrition%20Requirements\\_Revised%20Nov%202015.pdf](https://www.nutrition.org.uk/attachments/article/234/Nutrition%20Requirements_Revised%20Nov%202015.pdf)

<sup>13</sup> WHO Standards for Maternal and Neonatal Care: Provision of effective antenatal care

<sup>14</sup> Core Group Maternal and Nutrition Dietary Guide

[http://www.coregroup.org/storage/documents/Workingpapers/MaternalNutritionDietaryGuide\\_AED.pdf](http://www.coregroup.org/storage/documents/Workingpapers/MaternalNutritionDietaryGuide_AED.pdf)

native Arabic speaking members of the Nutrition Cluster, and then back-translated and checked by the BA Training team.

### **Training of Trainers and Cascade Training of Data Collectors**

An initial Training of Trainers (TOT) was conducted in Gaziantep, Turkey which was then followed by a cascade training of data collection teams in the field. Five Trainers representing organizations in North or South Syria participated in a two-day TOT which focused on the fundamentals of the Barrier Analysis technique, with special attention to the structure of questionnaires, the Designing for Behavior Change Framework (including “bridges to activities” and activity development), and development of interviewing skills. Additionally, a training was provided on using KoBo, a mobile platform for data collection. The *Practical Guide to Conducting a Barrier Analysis* was used for curriculum development.<sup>15</sup> During the training participants reviewed translated questionnaires and errors were corrected prior to survey practice. Data collectors were divided into groups to practice and familiarize themselves with interviewing and recording data according to the Doer/ Non-Doer method. Trainers were instructed to follow the same training technique when cascading the training to their data collectors in the field in order to ensure consistency in training methods.



Cascade training immediately followed the TOT, with 15 data collectors and 2 supervisors being trained in the North (Physicians Across Continents and Human Appeal) and 10 data collectors and 2 supervisors trained in the South (Syria Relief and Development). One of the Trainers traveled into Aleppo in Northern Syria to directly train data collectors for the 2 organizations involved in the North assessment. For South Syria, a remote cascade training was held over Skype due to logistical issues and security concerns in training them directly.

### **Sampling**

According to BA methodology, purposive sampling was used based on criteria related to the behaviors of interest. Teams in their allocated areas, first sampled from health facilities and community centers that were providing services to the BA target groups and then went into communities for further sampling. Prior to assessments approval was sought from clinics, community centers and communities to conduct data collection.

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<sup>15</sup> Kittle Bonnie. 2013. *A Practical Guide to Conducting a Barrier Analysis*. New York, NY: Helen Keller International

### **Data Collection and Coding**

Fieldwork lasted 6 days, with data collection for each behavior being conducted on one day and coding of the responses during the following day. During data collection, data collectors approached each potential participant, found a semi-private place to conduct the interview, introduced the study and offered informed consent. Those who met criteria and consented to be part of the study were then screened to determine Doer or Non-Doer status, before proceeding with the survey interview. KoBo, a free open-source tool for mobile data collection, was used by data collectors to collect data for the close-



ended questions in the field using their mobile devices. Coding with teams was done remotely over various online applications depending on connectivity. Coding of collected qualitative data occurred through an iterative group process with each team in order to arrive at a word or phrase that best represented the responses given. Codes were then tabulated and recorded for data analysis.

### **Data Analysis**

Once data was coded and tabulated or collected through KoBo, it was then entered into the Barrier Analysis Tabulation Excel Sheet for quantitative analysis in order to establish which determinants were found to be significantly different ( $p < 0.05$ ) or have a 15 percentage point difference among responses between Doers and Non-Doers. These significant determinants were analyzed to develop Bridges to Activities and recommendations. A Bridge to Activity is based on the responses given by respondents; they are more-specific descriptions of a change one should make to address the issue revealed by the Barrier Analysis research.

### **Assessment Limitations**

Several operational and technical challenges were faced during this assessment. While solutions were found for many of the challenges in order to minimize any impact on data quality, it is assumed that the results may have faced some minimal but negligible impact.

a) Since a direct training of data collectors in the field was not recommended, it is expected that there will have been some variation experienced between the training received by trainers and the training cascaded to their field teams, even if the training slides and activities were closely followed. This undoubtedly had some effect on data quality, however since there were only two trainings conducted for this BA then it is expected that the variation to have been minimal.

b) Challenges were faced when multiple trainers either dropped out with their agency/ data collectors at the last minute (in total 1 for the North and 1 for the South) from the BA assessment or were unavailable

during the times that were required of them according to the assessment schedule. This caused delays in the schedule, reworking of sampling at the last minute, not having enough trainers and not having enough data collectors to conduct the necessary interviews. To address these issues a consultant was brought in during the early stages of the BA to ensure continuity of the assessment.

c) Due to the remoteness of the assessment the training team experienced multiple issues with connecting to the data collection teams during training and assessment days. Switching between multiple applications was required in order to connect. These connection problems resulted in additional time being needed for training and coding. This challenge led to the adoption of new approaches to reduce the time to code the data, such as coding with smaller teams, sharing the codes in advance with the bigger teams, etc.

d) While the BA methodology identifies the most important barriers and enablers, it may not give a full picture of each of these barriers and enablers. Therefore, it will be useful to follow up this BA with focus group discussions on the barriers and enablers identified or further assessments to identify potential solutions.

## Results

### Sample description

In total, 551 Mothers were interviewed for all three behaviors of interest in North Syria (n=271) and in South Syria (n=280). The North was stratified into Camp IDP and Urban IDP locations, specifically Atmeh Camp in Idlib Governorate, Al'Mara District in Idlib Governorate and Jebel Saman District in Aleppo Governorate. The South was stratified into Urban IDP locations in Dar'a Governorate, specifically Tafas and Hrak Districts. Locations were chosen according to nutrition programming coverage of Cluster Partner organizations, as well as according to logistical and security issues.



Source: <https://eurasiangeopolitics.com/syrian-conflict-maps/>

**Table 1.** Total # of interviews per behavior

	Exclusive Breastfeeding (North: n= 91) (South: n= 90)		Diet Diversity (North: n= 91) (South: n= 95)		Extra Meal (North: n= 91) (South: n= 95)	
	Doer	Non-Doer	Doer	Non-Doer	Doer	Non-Doer
#Interviews North	45	46	45	45	45	45
#Interviews South	45	45	48	47	48	47

Responses from Doers and Non-Doers were analyzed for significance, based upon either a 15 percentage point difference among responses or statistical significance of 0.05 or less as calculated through the Barrier Analysis Tabulation Excel Sheet. The determinants found to be significant for each of the behaviors following data analysis are detailed below. Results in general were similar between the north locations, as well as the south locations and are not stratified by location; in a few instances where location might have a difference which should be taken into account when programming activities, the location is noted.

**Behavior 1: Mothers of children (ages 0- 6 months) who Exclusively Breastfeed (EBF)**

**11 determinants** in the North and **5 determinants** for the South were found to be significant for this behavior.

**Perceived Self- Efficacy**

*This determinant refers to an individual’s belief that he/she can do a particular behavior given his/ her current knowledge and skills. Respondents were asked what makes it (or what would make it) easier or difficult for them to give only breastmilk to their baby for the first 6 months of life.*

**NORTH SYRIA**

Key Findings	
Doers	<p><b>2.9 times</b> more likely to say that <b>Privacy to breastfeed baby/ safe place to BF</b> makes EBF <b>easier</b> (p=0.008)</p> <p>*Camp Doers also <b>13.1 times</b> more likely to say this (p=0.004)</p>
	<p><b>4.9 times</b> more likely to say that <b>Mother not working outside the house</b> makes EBF <b>easier</b> (p=0.001)</p> <p>*Camp Doers also <b>13.1 times</b> more likely (p=0.006) and Urban Doers (17% difference) more likely to say this</p>
	<p>More likely to say that <b>Availability of Enough and Diverse foods for mother to eat and produce milk</b> makes EBF <b>easier</b> (18% difference)</p> <p>*Urban Doers also more likely to say this (15% difference)</p>
	<p>More likely to say that <b>Knowing that baby will be immunized</b> makes EBF <b>easier</b> (15% difference)</p> <p>*Camp Doers also more likely to say this (17% difference)</p>
	<p>More likely to sat that <b>No need to prepare milk/ don’t need time to prepare milk/ Easier to give breastmilk</b> makes EBF <b>easier</b> (18% difference)</p> <p>*Urban Doers also <b>3.5 times</b> more likely to say this (p=0.025)</p>
	<p>More likely to say that <b>Mother has enough milk/ continuous availability of milk</b> makes EBF <b>easier</b> (24% difference) (Camp)</p>

	More likely to say <b>Mother convinced by knowledge of IYCF (campaigns, multimedia advice from gynecologist)</b> makes EBF <b>easier</b> (16% difference) (Urban)
	More likely to say that <b>Family does not object to EBF (ex: mother-in-law)</b> makes EBF <b>easier</b> (17% difference) (Urban)
	<b>13.3 times</b> more likely to say that <b>Members of the family interfere with breastfeeding/ they object</b> makes EBF <b>difficult</b> (p=0.000)
	*Both Urban and Camp Doers also <b>13.2 times</b> more likely to say this (p=0.012)
	3.3 times more likely to say that <b>Baby has candida of the mouth</b> makes EBF <b>difficult</b> (p=0.015) (Total)
	*Camp Doers <b>4 times</b> more likely to say this (p=0.041)
	More likely to say that <b>Breast problems/ pain in breasts / inflammation in nipple</b> makes EBF <b>difficult</b> (16% difference) (Urban)
	More likely to say that <b>Market is far away for food</b> makes EBF <b>difficult</b> (17% difference) (Urban)
<b>Non-Doers</b>	<b>3.6 times</b> more likely to say that <b>Mother is relaxed so then can BF</b> makes EBF <b>easier</b> (p=0.003) (Total)
	*Camp Non-Doers also more likely to say this (p=0.000)
	More likely to say that <b>Baby likes being breastfed/ mother likes breastfeeding</b> makes EBF <b>easier</b> (16% difference)
	*Camp Non-Doers also <b>3.8 times</b> more likely to say this (p=0.024)
	More likely to say that <b>Baby can suckle</b> makes EBF <b>easier</b> (18 difference) (Camp)
	More likely to say that <b>Mother has enough milk/ continuous availability of milk</b> makes EBF <b>easier</b> (15% difference) (Urban)
	More likely to say that <b>Milk is free/ saves money to pay for other things</b> makes EBF <b>easier</b> (15% difference) (Urban)
	More likely to say that <b>Breast problems/ pain in breasts / inflammation in nipple</b> makes EBF <b>difficult</b> (25% difference) (Camp)
	More likely to say that <b>Mother is not relaxed/ stressed (in camp, cold in winter)</b> makes EBF <b>difficult</b> (24% difference) (Camp)
	More likely to say that <b>Baby needs more milk/ not satisfied/ not enough milk produced</b> makes EBF <b>difficult</b> (19% difference) (Urban)
	More likely to say that <b>Baby keeps crying/ teething</b> makes EBF <b>difficult</b> (25% difference) (Urban)
	More likely to say that <b>Baby has stomach problems and colic from milk</b> makes EBF <b>difficult</b> (15% difference) (Urban)

More likely to say that <b>Husband is away for work can't bring food home</b> makes EBF <b>difficult</b> (18% difference) (Urban)
More likely to say that <b>Mother has anemia</b> makes EBF <b>difficult</b> (19% difference) (Urban)

The results for Doers indicate there are several facilitating factors that make it easier for mothers to exclusively breastfeed such as knowledge of IYCF, family support, private spaces to breastfeed, having time to breastfeed, not working outside the house, not needing to prepare breastmilk, the mother being able to access and consume diverse food in order to produce milk, and having enough and continuous breastmilk. Facilitators stated by Non-Doers include the mother having enough and continuous availability of milk, the mother needing to be relaxed in order to breastfeed, both mother and baby enjoying breastfeeding, economic benefits of breastfeeding and the baby being able to suckle.

Doers stated several barriers, however since they are already practicing the behavior it is not necessary to address most of these factors. However it is important to address a couple of barriers including market access issues through expansion of food basket distribution or home gardens, as well as their concerns related to breastfeeding when experiencing breast problems (pain in breasts or inflammation in nipples) which can be alleviated through skilled support. Barriers to exclusive breastfeeding for Non-Doers are related to stress of the mother, the perception that the baby is not satisfied and needs more milk, the mother has anemia, physical issues with breastfeeding for both the mother (breast problems) and baby (stomach problems, colic, teething) and lack of support from the husband. This suggests that there needs to be more skilled support in order to change misconceptions that mothers may have related to breastfeeding when the baby has stomach problems, colic, teething, or in general are not satisfied with the amount of breastmilk, or if the mother experiences breast problems. Additionally, improving the environment in which mothers are breastfeeding is critical so that mothers feel like they are supported and relaxed.

## SOUTH SYRIA

Key Findings	
<b>Doers</b>	<b>3.6 times</b> more likely to say that <b>Milk is easy to get (doesn't need to be prepared like formula)</b> makes EBF <b>easier</b> (p=0.01) (Total)
<b>Non-Doers</b>	More likely to say that <b>Mother doesn't produce enough milk</b> Makes EBF <b>difficult</b> (18% difference) (Total)
	7.3 more likely to say that <b>Mother's sickness</b> makes EBF <b>difficult</b> (0.029) (Total)
	3.6 more likely to say that <b>Baby doesn't accept mother's breast/ not satisfied</b> makes EBF <b>difficult</b> (0.010) (Total)



Doers in the South stated that the convenient accessibility of breastmilk was a facilitating factor for Mothers, while barriers for Non-Doers included mothers perceiving that they were unable to produce enough milk, the baby not being satisfied with the breastmilk and the concern over passing a mother’s sickness through their breastmilk. These results suggest that misconceptions about satiety, milk production and mother-child transmission of viruses need to be addressed through tailored counseling and skilled support. Additionally, a possible reason for babies not accepting a mother’s breast is that they are being fed infant formula. While the price of formula in the South is very expensive, there is an issue with large-scale distribution of free formula through private sector donation. Mother’s need to be convinced not to accept formula or to instead use the formula for their children above 2 years of age. Furthermore, the International Code of Marketing of Breastmilk Substitutes needs to be reinforced and further advocated for in targeted areas.

**Perceived Positive or Negative Consequences**

*This determinant refers to an individual’s perception of the good or bad things that would result from performing a behavior. Respondents were asked what are (or what would be) the advantages/ disadvantages of only giving breastmilk to their baby for the first 6 months of life.*

**NORTH SYRIA**

<b>Key Findings</b>	
<b>Doers</b>	<b>5.3 times</b> more likely to say that <b>Good baby growth/ weight</b> is an <b>advantage</b> of EBF (p=0.000)  *Urban Doers also <b>4.6 times</b> more likely to say this (p=0.009) and Camp Doers 5.4 times more likely to say this (p=0.004)
	More likely to say that <b>Protects babies from diseases/ immunity</b> is an <b>advantage</b> of EBF (15% difference) (Camp)
	More likely to say that <b>Baby will be healthy</b> is an <b>advantage</b> of EBF (19% difference) (Camp)
	More likely to say that <b>Growth of teeth</b> is an <b>advantage</b> of EBF (17% difference) (Camp)
	<b>5.7 times</b> more likely to say that <b>Baby will get diseases if mother takes only 1 type of food</b> is a <b>disadvantage</b> of EBF (p=0.027) (Urban)
	More likely to say that <b>Child will be more intelligent</b> is an <b>advantage</b> of EBF (20% difference) (Urban)
	More likely to say that <b>Better bonding between mother &amp; child</b> is an <b>advantage</b> of EBF (16% difference) (Urban)
	More likely to say that <b>Baby is comfortable and sleeps well</b> is an <b>advantage</b> of EBF (17% difference) (Urban)
	More likely to say that <b>Mother will lose weight and lead to illness/ disease</b> is a <b>disadvantage</b> of EBF (18% difference)

	*Urban Doers also more likely to say this (21% difference)
	More likely to say that <b>Mother doesn't have time to do household chores/ wastes time/ no time for outside work</b> is an <b>disadvantage</b> of EBF (18% difference)
	*Camp Doers also <b>3.4 times</b> more likely to say this (p=0.036)
	<b>3 times</b> more likely to say that <b>Baby keeps crying/ still hungry</b> is a <b>disadvantage</b> of EBF (p=0.045) (Urban)
	More likely to say that <b>Changes breast shape</b> is a <b>disadvantage</b> of EBF (21% difference) (Urban)
	More likely to say that <b>Mother will lose calcium/ lose hair/ lose immunity/ get dizzy</b> is a <b>disadvantage</b> of EBF (17% difference) (Urban)
<b>Non-Doers</b>	<b>1.4 times</b> more likely to say that <b>Protects babies from diseases/ immunity</b> is an <b>advantage</b> of EBF (p=0.000) (Urban)
	More likely to say <b>Saves money/ don't need to pay for formula</b> is an <b>advantage</b> of EBF (25% difference) (Urban)
	More likely to say <b>Baby will get diseases if mother takes specific types of food</b> is a <b>disadvantage</b> of EBF (24% difference) (Camp)
	<b>4.1 times</b> more likely to say that <b>Changes breast shape</b> is a <b>disadvantage</b> of EBF (p=0.037) (Camp)
	More likely to say <b>No disadvantages</b> of EBF (23% difference) (Urban)
	More likely to say <b>Family problems (ex: not giving attention to the husband)</b> is a <b>disadvantage</b> of EBF (19% difference) (Urban)

Overall, both Doer and Non-Doer Mothers demonstrated they had adequate knowledge about the advantages of exclusively breastfeeding. Stated advantages included factors such as “good baby growth”, immunity, good health, growth of teeth, better sleep and comfort, increased intelligence, increased bonding between mother and baby, and the economic benefits of breastfeeding. However both Doers and Non-Doers have several misconceptions about exclusive breastfeeding which can be seen in the disadvantages they have stated, such as thinking that breastfeeding is a “waste of time”, the baby is unsatisfied, it changes breast shape and it will lead to health problems in the mother (loss of weight, illness, loss of calcium, loss of immunity). Additionally, Non-Doers reveal that exclusive breastfeeding leads to problems in the family. These results suggest that not only do mothers need their perceptions of disadvantages changed through improved awareness raising activities, skilled support and counseling, but also more needs to be done at the family- level in order to increase and ensure support to breastfeeding mothers.

## SOUTH SYRIA

Key Findings	
Doers	More likely to say that <b>Mother's milk is free (Saves money)</b> is an <b>advantage</b> of EBF (16% difference)
	More likely to say that <b>No disadvantages</b> of EBF (18% difference)

These results again highlight an important fact that “mother’s milk is free” and the need to disseminate such important messages not only to mother’s, but also at the family- and community- level.

### Perceived Social Norms

*This determinant refers to an individual’s perception of the approval or disapproval of doing a behavior by people considered to be important in an individual’s life. Respondents were asked who approves or disapproves of them giving only breastmilk to their baby for the first 6 months of life.*

## NORTH SYRIA

Key Findings	
Doers	<b>2.9 times</b> more likely to say <b>Sister-in-law approves</b> of EBF (p=0.006)
	*Urban Doers also 3.9 times more likely to say this (p=0.029) and Camp Doers also more likely to say this (24% difference)
	<b>6.5 times</b> more likely to say <b>Doctor/ Pharmacist approves</b> of EBF (p=0.013) (Urban)
	More likely to say <b>Neighbor approves</b> of EBF (17% difference) (Urban)
	More likely to say <b>Community Health Workers approve</b> of EBF (21% difference) (Urban)
	More likely to say <b>Friends approve</b> of EBF (17% difference) (Urban)
	<b>3.4 times</b> more likely to say <b>Mother-in-law would disapprove</b> of EBF (p=0.036) (Camp)
	More likely to say <b>Neighbor disapproves</b> of EBF (21% difference) (Urban)
Non-Doers	More likely to say <b>Mother would disapprove</b> of EBF (14% difference) (Urban)
	More likely to say <b>Mother-in-law would disapprove</b> of EBF (18% difference) (Urban)

Doers indicated that mother-in-law’s and neighbor’s disapprove of EBF, however since these particular Mothers are already practicing the behavior it is unlikely that these 2 influential groups are serving as barriers. While there are many stated groups (sister-in-law’s, doctor/ pharmacist’s, neighbor’s, community health workers and friends) that approve of Mother’s exclusively breastfeeding their babies, it is important to focus programming efforts on Mother’s and Mother-in-law’s who are stated by Non- Doers as people that disapprove and as a result serve as barriers to the effective practice of the behavior.

## SOUTH SYRIA

Doers	3.1 times more likely to say <b>No One</b> would <b>disapprove</b> of EBF (p=0.01)
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### Perceived Access

*This determinant refers to a person's perception about access to resources or support needed to do a behavior. Respondents were asked how difficult it is to get the support they need to give only breastmilk to their baby for the first six months of life.*

Overall, Doers in the North were more likely to say it is **Somewhat Difficult** (18% difference) to get the support they need to exclusively breastfeed their baby. Doers in Camps were **12 times** more likely to also say **Somewhat Difficult** (p=0.000). Urban Non-Doers were more likely to also say **Somewhat Difficult** (20% difference). While Doers indicate they are not getting enough support, they are still practicing EBF, however it is important to address the lack of enough support experienced by Non-Doers.

### Perceived Cues for Action / Reminders

*Respondents were asked how difficult it is to remember to give only breast milk to your baby for the first 6 months of life.*

In the North, Doers were **5.6 times** more likely to indicate that it is **Not Difficult At All** (p=0.000) to remember. Doers in Camps were **4.9 times** more likely to also say **Not Difficult At All** (p=0.010).

In the South, Doers were **3.3 times** more likely to indicate that it is **Not Difficult At All** (p=0.042) compared to Non-Doers who were **2.5 times** more likely to say it was **Somewhat Difficult** (p=0.018). These results demonstrate the need to improve the ability of mothers in the South to remember to EBF for the first 6 months of life.

### Perceived Susceptibility/ Risk

*This determinant refers to a person's perception of how vulnerable or at risk he/ she feels to a certain problem. Respondents were asked how likely it is that their baby will become malnourished or get diarrhea in the coming year.*

In the North, Doers were **2.8 times** more likely to indicate that it is **Not Likely At All** (p=0.012), while Non-Doers were **4.1 times** more likely to say **Very Likely** (p=0.019) or **4.6 times** more likely to say **Somewhat Likely** (p=0.001) for their baby to get malnourished. Doers in Camps were **6.5 times** more likely to indicate that it is **Not Likely At All** (p=0.013) and Non-Doers were more likely to say **Very Likely** (23% difference). These results highlight the fact that Non-Doers think their children are at higher risk of becoming malnourished and this is especially true for Non-Doer Mothers in Camp settings.

### Perceived Severity

*This determinant refers to a person's belief that the problem is serious. Respondents were asked how serious would it be if their baby became malnourished or got diarrhea.*

Doers in the North were **3.6 times** more likely to indicate that it is **Somewhat Serious** (p=0.002) for their baby to get malnourished and **Somewhat Serious** (16% difference) for their baby to get diarrhea. Doers in camps were **3.4 times** more likely to also indicate that it is **Somewhat Serious** (p=0.036) for their baby to get malnourished and **5.4 times** more likely to indicate that it is **Somewhat Serious** (p=0.010) for their baby

to get diarrhea. Urban Doers were **3.4 times** more likely to also indicate that it is **Somewhat Serious** ( $p=0.036$ ) for their baby to get malnourished. These results indicate that Doers were more likely to understand the gravity of their baby becoming malnourished or getting diarrhea compared to Non-Doers, however the fact that they only consider these conditions as only “somewhat serious” instead of “very serious” means that there needs to be further education regarding the level of severity of these conditions.

### Perceived Action Efficacy

*This determinant refers to the belief that by practicing the behavior an individual will avoid a certain problem. Respondents were asked how likely is it that their baby will become malnourished or get diarrhea if they only breastfed for the first 6 months of life.*

Significant determinants were found when disaggregating the data by camps or urban settings rather than when looking at the whole North. In Camp settings, Doers were more likely to say it is **Not Likely At All** (17% difference) that their baby will become malnourished if they only breastfed for the first 6 months. Camp Doers also were **3.5 times** more likely to indicate that it is **Somewhat Likely** ( $p=0.025$ ) that their baby will get diarrhea if they only breastfed for the first 6 months. Urban Non-Doers were more likely to state that it is **Somewhat Likely** (15% difference) that their baby will become malnourished and **Somewhat Likely** (21% difference) that their baby will get diarrhea if they only breastfed for the first 6 months. Urban Doers were more likely to say it is **Somewhat Likely** (21% difference) that their baby will get diarrhea if they only breastfed for the first 6 months.

The results indicate that while Doers in Camp settings understand the relationship between exclusive breastfeeding and reducing the likelihood of their baby becoming malnourished, there seems to be less understanding of the relationship between exclusive breastfeeding and diarrhea. There also seems to be a lack of proper understanding among Urban Non-Doers about the relationship between exclusive breastfeeding and malnourishment, as well as among Urban Non-Doers and Doers about the relationship between exclusive breastfeeding and diarrhea. Programmers need to ensure that Mothers have the correct understanding about these causal relationships so that they fully understand the importance of why they need to practice exclusively breastfeeding with their baby.

### Divine Will

*Respondents were asked if they thought God causes malnutrition or diarrhea.*

Overall, Doers in the North were **2.8 times** more likely to say **Maybe** ( $p=0.022$ ) God causes diarrhea. Camp Doers were **7.4 times** more likely to say **Yes** ( $p=0.006$ ) God causes malnutrition. Urban Doers were more likely to say **Maybe** (21% difference) God causes malnutrition and **Maybe** (25% difference) God causes diarrhea. These results are not very clear and warrant further investigation to better understand whether Mother’s really do associate malnutrition or diarrhea with God’s will.

### Culture

*Respondents were asked if there are any cultural rules or taboos against only breastfeeding their baby for 6 months of life.*

Doers in the North were **10.4 times** more likely to say **Yes** ( $p=0.000$ ) there are cultural rules or taboos, while Non-Doers were **2.8 times** more likely to say **No** ( $p=0.009$ ). Camp Doers were more likely to also say

Yes (p=0.000) there are cultural rules or taboos, while Non-Doers were **25 times** more likely to say No (p=0.000).

**Behavior 2: Mothers of children 6 – 23 months feed a diverse diet to their children containing foods from at least 4 of the 7 food groups per day**

**11 determinants** in the North and **8 determinants** for the South were found to be significant for this behavior.

**Perceived Self- Efficacy**

*Respondents were asked what makes it (or what would make it) easier or difficult in feeding their child foods from at least 4 of the 7 different food groups each day.*

**NORTH SYRIA**

<b>Key Findings</b>	
<b>Doers</b>	<b>2.5 times</b> more likely to say <b>Child loves and wants food</b> makes it <b>easier</b> to feed their child a diverse diet (p=0.016)  * Urban Doers also <b>4.1 times</b> more likely to say this (p=0.012) and Camp Doers also say this (20% difference)
	<b>2.4 times</b> more likely to say <b>Having electricity to cook food</b> makes it <b>easier</b> to feed their child a diverse diet (p=0.042)  * Camp Doers also <b>5.1 times</b> more likely to say this (p=0.007)
	More likely to say that <b>Husband and family members help feed the baby</b> makes it <b>easier</b> to feed their child a diverse diet (20% difference)  *Camp Doers also <b>3.9 times</b> more likely to say this (p=0.029)
	More likely to say that <b>Market is close to home</b> makes it <b>easier</b> to feed their child a diverse diet (16% difference)  *Camp Doers also more likely to say this (24% difference)
	<b>3.9 times</b> more likely to say <b>Receiving advice from nutrition counselors/health worker/doctors</b> makes it <b>easier</b> to feed their child a diverse diet (p=0.029) (Urban)
	<b>4 times</b> more likely to say <b>Other family members support (emotional) her to feed her child/encouragement</b> makes it <b>easier</b> to feed their child a diverse diet (p=0.041) (Urban)
	<b>4.6 times</b> more likely to say <b>Availability of food in the house</b> makes it <b>easier</b> to feed their child a diverse diet (p=0.009) (Urban)
	More likely to say that <b>Having enough time to feed baby (busy with other children or household chores)</b> makes it <b>easier</b> to feed their child a diverse diet (16% difference) (Urban)  *Camp Doers also <b>3.2 times</b> more likely to say this (p=0.041)

	<p>More likely to say that <b>Having child eat with other siblings encourages them to eat</b> makes it <b>easier</b> to feed their child a diverse diet (17% difference) (Urban)</p>
	<p><b>2.4 times</b> more likely to say <b>Husband isn't available at home, so cannot get food</b> makes it <b>difficult</b> to feed their child a diverse diet (p=0.032)</p> <p>*Urban Doers also more likely to say this (21% difference) and Camp Doers also <b>3.4 times</b> more likely say this (p=0.036)</p>
	<p><b>5.5 times</b> more likely to say <b>interference from other family members/ neighbors</b> makes it <b>difficult</b> to feed their child a diverse diet (p=0.015)</p> <p>* Camp Doers also <b>13.2 times</b> more likely to say this (p=0.012)</p>
	<p><b>3.9 times</b> more likely to say <b>No fuel to cook food</b> makes it <b>difficult</b> to feed their child a diverse diet (p=0.025)</p> <p>* Camp Doers also <b>15.8 times</b> more likely to say this (p=0.001)</p>
	<p>More likely to say that <b>markets are far</b> makes it <b>difficult</b> to feed their child a diverse diet (16% difference)</p>
	<p>More likely to say that <b>Child only likes to eat junk food and not nutritious food</b> makes it <b>difficult</b> to feed their child a diverse diet (16% difference)</p> <p>*Urban doers also <b>3.9 times</b> more likely to say this (p=0.029) and Camp Doers also say this (17% difference)</p>
	<p><b>3.9 times</b> more likely to say <b>No fridge to store food</b> makes it <b>difficult</b> to feed their child a diverse diet (p=0.029) (Urban)</p>
	<p>More likely to say that <b>No time because mother works outside the home</b> makes it <b>difficult</b> to feed their child a diverse diet (16% difference) (Urban)</p> <p>*Camp doers also more likely to say this (15 difference)</p>
<b>Non-Doers</b>	<p>More likely to say that <b>Child doesn't accept food (wants to breastfeed)</b> would make it <b>difficult</b> to feed their child a diverse diet (15% difference) (Camp)</p>
	<p>More likely to say that <b>No time because the mother works outside the home</b> would make it <b>difficult</b> to feed their child a diverse diet (16% difference)</p>
	<p>More likely to say that <b>Child is sick/ thyroid issues make child eat less</b> would make it <b>difficult</b> to feed their child a diverse diet (20% difference) (Urban)</p>

Overall, Doers in the North indicated that factors that facilitate feeding their child a diverse diet include support from husband and family members, accessibility to markets, availability of foods in the house, enough time to feed their child, the child loves/ wants food, having electricity to cook food, and receiving advice about complementary feeding.

While Doers stated several barriers, they are still practicing the behavior so most of these do not need to be addressed. However it is important to address issues related to interference by family members, distance to markets and lack of time for because the mother is working outside of the house. Non-Doers stated that barriers to practicing the behavior were not enough time for Mother’s to prepare food because she is working outside the house, the child does not accept the prepared food, and if the child is sick or has thyroid issues. These results point to the fact that there are misconceptions around proper complementary feeding practice, which highlights the need for increased education and counseling about sick child feeding, as well as methods to encourage children to eat certain foods. Additionally, it is critical for there to be meal planning with Mother’s in order to show them how to best acquire food, prepare a diverse meal and feed their children in a timely manner. This should be done with the support and encouragement of her family members in order to ensure there is no interference from them.

**SOUTH SYRIA**

<b>Non-Doers</b>	<b>4.2 times</b> more likely to say that <b>Having different kinds of food in market</b> would makes it <b>easier</b> to feed their child a diverse diet (0.018)
	<b>2.7 times</b> more likely to say that <b>No difficulties</b> would make it <b>difficult</b> to feed their child a diverse diet (0.048)
	More likely to say that <b>Not having money to buy food</b> would make it <b>difficult</b> to feed their child a diverse diet (18% difference)

In the South, Non- Doers specified that having diverse foods in markets would make it easier to feed their child a diverse diet, however a barrier to buying such foods is a lack of money. These results reveal that programmers need to focus on how to make diverse foods more accessible in the South and how to make them more affordable.

**Perceived Positive or Negative Consequences**

*Respondents were asked what are (or what would be) the advantages/ disadvantages of feeding their child foods from at least 4 of the 7 different food groups each day.*

**NORTH SYRIA**

<b>Key Findings</b>	
<b>Doers</b>	<b>3.3 times</b> more likely to say <b>Prevents anemia</b> is an <b>advantage</b> of feeding their child a diverse diet (p=0.015)  * Camp Doers also <b>3.9 times</b> more likely to say this (p=0.029)
	<b>3 times</b> more likely to say <b>Child sleeps better/ more comfortable and calm/ satisfied</b> is an <b>advantage</b> of feeding their child a diverse diet (p=0.018)



	<p>* Camp Doers also <b>4.5 times</b> more likely to say this (p=0.015)</p>
	<p>More likely to say that <b>Provides nutrients for the child's body</b> is an <b>advantage</b> of feeding their child a diverse diet (16% difference)</p> <p>*Camp doers also <b>3.5 times</b> more likely to say this (p=0.0250)</p>
	<p>More likely to say that <b>Improves mobility of child (ex walking) / makes child more active</b> is an <b>advantage</b> of feeding their child a diverse diet (16% difference)</p>
	<p>More likely to say <b>Makes child more independent/ not as connected to the mother</b> is an <b>advantage</b> of feeding their child a diverse diet (21% difference) (Camp)</p>
	<p>More likely to say that <b>Protects child from malnutrition</b> is an <b>advantage</b> of feeding their child a diverse diet (16% difference) (Camp)</p>
	<p><b>3.9 times</b> more likely to say <b>Helps teeth/ hair growth</b> is an <b>advantage</b> of feeding their child a diverse diet (p=0.036) (Camp)</p> <p><b>15.8 times</b> more likely to say this (p=0.001) (Urban)</p>
	<p><b>3 times</b> more likely to say <b>Improves child's intelligence (ex: talent, creativity)</b> is an <b>advantage</b> of feeding their child a diverse diet (p=0.0500) (Urban)</p> <p>* Camp Doers also more likely to say this (21 difference)</p>
	<p>More likely to say that <b>Increases appetite/ thirst</b> is an <b>advantage</b> of feeding their child a diverse diet (17% difference) (Urban)</p> <p>*Camp doers also more likely to say this (17% difference)</p>
	<p>More likely to say <b>Child less likely to get diseases</b> is an <b>advantage</b> of feeding their child a diverse diet (21% difference) (Urban)</p>
	<p>More likely to say that <b>Child gets sick/ food poisoning/ intestinal complications</b> is a <b>disadvantage</b> of feeding their child a diverse diet (18% difference)</p>
	<p><b>15.8 times</b> more likely to say <b>It does not give immunity to the child</b> is a <b>disadvantage</b> of feeding their child a diverse diet (p=0.001)</p>
	<p>More likely to say that <b>No disadvantages</b> is a <b>disadvantage</b> of feeding their child a diverse diet (17% difference)</p>
<b>Non-Doers</b>	<p><b>6.2 times</b> more likely to say <b>Mother's body not being depleted/ made weak from having to breastfeed child</b> would be an <b>advantage</b> of feeding their child a diverse diet (p=0.007)</p> <p>* Camp Non-Doers also <b>13.1 times</b> more likely to say this (p=0.004)</p>
	<p><b>2.8 times</b> more likely to say <b>Helps teeth/ hair growth</b> would be an <b>advantage</b> of feeding their child a diverse diet (p=0.012)</p>

**1.1 times** more likely to say [Child gets sick/ food poisoning/ intestinal complications](#) would be a **disadvantage** of feeding their child a diverse diet (p=0.000)

Doers Mother's seemed to understand the overall benefits of a diverse diet to a child's health and development, such as increased sleep/ comfort, provides nutrients, improves mobility and independence, prevents malnutrition, helps growth of teeth/ hair, increases intelligence, and increases appetite. Doers in the North were more likely to specify more disadvantages than Non-Doers Mother's, such as a diverse diet not providing immunity. However both Doers and Non- Doers seemed to think that a diverse diet leads to children getting sick from food poisoning or intestinal complications. This demonstrates that there are some lack of knowledge and misconceptions surrounding this behavior and warrant further discussion about benefits of diverse diets, hygiene practices, and what types of food to feed children of this age.

### SOUTH SYRIA

<b>Doers</b>	<b>2.5 times</b> more likely to say <a href="#">Helps the child grow</a> is an <b>advantage</b> of feeding their child a diverse diet (0.013)
	<b>2.9 times</b> more likely to say <a href="#">Provides child with energy</a> is an <b>advantage</b> of feeding their child a diverse diet (0.022)
<b>Non-Doers</b>	More likely to say that <a href="#">Provides immunity</a> is an <b>advantage</b> of feeding their child a diverse diet (18% difference)

Doers and Non-Doers stated a few advantages of feeding a child a diverse diet, including helping growth, providing energy and immunity.

### Perceived Social Norms

*Respondents were asked who are the people that approve or disapprove of them feeding their child foods from at least 4 of the 7 different food groups each day.*

### NORTH SYRIA

Key Findings	
<b>Doers</b>	<b>2.8 times</b> more likely to say <a href="#">Community Health Worker approves</a> of feeding a child a diverse diet (p=0.022)  *Urban Doers also more likely to say this (17% difference) and Camp Doers also say this (25% difference)
	More likely to say <a href="#">Sister-in-law approves</a> of feeding a child a diverse diet (16% difference) (Camp)
	<b>12.5 times</b> more likely to say <a href="#">Doctor approves</a> of feeding a child a diverse diet (p=0.028) (Urban)

	More likely to say <b>Mother-in-law approves</b> of feeding a child a diverse diet (20% difference) (Urban)
	More likely to say <b>Husband approves</b> of feeding a child a diverse diet (19% difference) (Urban)
	More likely to say <b>Grandmother approves</b> of feeding a child a diverse diet (17% difference) (Urban)
	More likely to say <b>Aunt approves</b> of feeding a child a diverse diet (16% difference) (Urban)
	More likely to say <b>No one disapproves</b> of feeding a child a diverse diet (16% difference) *Urban Doers also more likely to say this (16% difference) (Urban) and Camp also say this (20% difference)
	<b>13.2 times</b> more likely to say <b>Sister-in-law disapproves</b> of feeding a child a diverse diet (p=0.012) (Camp)
	<b>14.8 times</b> more likely to say <b>Sister disapproves</b> of feeding a child a diverse diet (p=0.002) (Urban)
<b>Non-Doers</b>	More likely to say <b>Sister would disapprove</b> of feeding a child a diverse diet (23% difference) (Camp)
	More likely to say <b>Aunt would disapprove</b> of feeding a child a diverse diet (23% difference) (Urban)

Doers indicated that Community Health Workers, sister-in-law's, doctor's, mother-in-law's, husbands, grandmothers and aunts approve of feeding a child a diverse diet. Therefore increasing the involvement of these influential groups in nutrition activities may have a positive influence on Mother's. Doers also indicated that sister-in-law's and sister's disapprove of the practice, however since these particular Mother's are already practicing the behavior it is unlikely that these two influential groups are serving as barriers. Non-Doers indicated that Sisters and Aunts disapprove of Mother's feeding a diverse diet to their children, further assessment should be conducted to better understand the reasoning behind this disapproval.

## SOUTH SYRIA

<b>Doers</b>	More likely to say <b>Husband approves</b> of feeding a child a diverse diet (p=0.012)
	<b>12.5 times</b> more likely to say <b>Mother-in-law approves</b> of feeding a child a diverse diet (p=0.029)

### Perceived Access

*Respondents were asked how difficult it is to get food from at least 4 of the 7 food groups.*

Overall, Non-Doers in the North were **2.6 times** more likely to indicate that it was **Very Difficult** (p=0.022) and Doers were 3.5 times more likely to indicate that it was **Somewhat Difficult** (p=0.001) to get food from at least 4 of the food groups. These results were similar to Camp Non-Doers who were **5.7 times** more likely to indicate that it was **Very Difficult** (p=0.009), while Doers were **4.3 times** more likely to indicate that it was **Somewhat Difficult**. Urban Doers were also more likely to say it was **Somewhat Difficult** (24% difference),

however some Doers also indicated that it was **Not Difficult At All** (17% difference). These results demonstrate the difficulty that Non-Doers experience in accessing diverse foods, especially in camp settings, highlighting the need for activities that improve access of households to diverse foods.

In the South, Non-Doers **12.7 times** more likely to say it was **Very Difficult** ( $p=0.002$ ) or **2.9 times** more likely to say **Somewhat Difficult** ( $p=0.005$ ) to get food from at least 4 of the food groups. Doers were **7.1 times** more likely to say it was **Not Difficult At All** ( $p=0.000$ ). Again, these results the critical need for programming to address access issues related to diverse foods.

### **Perceived Cues for Action / Reminders**

*Respondents were asked how difficult it is to remember to include foods from at least 4 of the 7 food groups during meal preparation.*

Overall, Doers in the North were **3.2 times** more likely to indicate that it was **Not Difficult At All** ( $p=0.003$ ) to remember to include 4 of the food groups. Camp Doers (16% difference) and Urban Doers ( $p=0.005$ ) were also more likely to indicate that it was **Not Difficult At All**.

Doers in the South were **3 times** more likely to indicate that it was **Not Difficult At All** ( $p=0.004$ ) to remember to include 4 of the food groups, while Non-Doers were more likely to say it was **Somewhat Difficult** (18% difference).

### **Perceived Susceptibility/ Risk**

*Respondents were asked how likely it is that their child will become malnourished in the coming year.*

Overall, Doers in the North were **2.8 times** more likely to indicate that it was **Not Likely At All** ( $p=0.015$ ) for their child to become malnourished. While Urban Doers were also likely to say **Not Likely At All** (25% difference), Camp Doers were however more likely to indicate that it was **Somewhat Likely** (17% difference). These results highlight the fact that Doers in camps, compared to Urban Doers, think their children are at higher risk of becoming malnourished

Doers in the South were **4 times** more likely to indicate that it was **Not Likely At All** ( $p=0.003$ ) for their child to become malnourished, while Non-Doers were **4.4 times** more likely to say it was **Very Likely** ( $p=0.003$ ). These results highlight the fact that Non-Doers think their children are at higher risk of becoming malnourished.

### **Perceived Severity**

*Respondents were asked how serious would it be if their child became malnourished.*

Doers were **2.2 times** more like to indicate that it was **Somewhat Serious** ( $p=0.038$ ) if their child became malnourished. While Camp Doers also indicated that it was **Somewhat Serious** (15% difference) Non-Doers were 3.4 times more likely to state that it was **Very Serious** ( $p=0.036$ ). Urban Doers were more likely to say **Very Serious** (19% difference). These results demonstrate that while Non-Doers understand the full severity of their children becoming malnourished, Doers are likely to think of this as being somewhat less severe. While these results are not very clear, it is suggested that messaging about the severity of malnutrition should be reviewed and revised if necessary.

### Perceived Action Efficacy

Respondents were asked how likely is it that their child will become malnourished if they feed him/her foods from at least 4 of the 7 food groups each day.

Overall Doers in the North were **3.1 times** more likely to indicate that it was **Not Likely At All** (p=0.005). Camp Doers were also more likely to state that it was **Not Likely At All** (16% difference). Urban Doers were also **7.5 times** more likely to say it was **Not Likely At All** (p=0.006).

In the South, Non-Doers were more likely to say it was **Somewhat Likely** (18% difference) to become malnourished if fed a diverse diet. These results highlight the fact that Non-Doers do not quite understand the relationship between feeding a child a diverse diet and the prevention of malnutrition.

### Divine Will

Respondents were asked if they thought that if a child becomes malnourished it is due to God's will.

Doers were **2.7 times** more likely to indicate that **No** (p=0.010) it is not due to God's Will. While Camp Doers indicated **Maybe** (p=0.041), Non-Doers were more likely to state that **Yes** (29% difference) it is due to God's Will. Urban Doers were **3.1 times** more likely to say either **No** (p=0.041), while Non-Doers were more likely to say **Yes** (19% difference). Due to the mix of answers received, further assessment would be needed to clarify if Mother's indeed believe that it is God's Will or not.

### Culture

Respondents were asked if there are any cultural rules or taboos against feeding their baby foods from at least 4 of the 7 food groups each day.

Doers were **14.1 times** more likely to indicate that there are **No** (p=0.005) cultural rules or taboos. Camp Doers (19% difference) and Urban Doers (19% difference) on the other hand were more likely to say **Maybe**. Again, due to the multiple conflicting answers given, it would be best to further assess this issue in order to clarify whether Mother's believe there are any cultural rules or taboos.

### Behavior 3: Pregnant women consume an additional meal daily during pregnancy

**11 determinants** in the North and **9 determinants** for the South were found to be significant for this behavior.

### Perceived Self- Efficacy

Respondents were asked what makes it (or what would make it) easier or difficult to eat an extra meal each day while pregnant.

### NORTH SYRIA

Key Findings	
Doers	<b>2.9 times</b> more likely to say <b>Advice from nutrition workers</b> makes it <b>easier</b> to eat an extra meal (p=0.007)

<p>*Both Urban Doers (25% difference) and Camp Doers also <b>7 times</b> more likely to say this (p=0.009)</p>
<p><b>2.4 times</b> more likely to say <b>Mother has an appetite</b> makes it <b>easier</b> to eat an extra meal (p=0.017)</p> <p>*Urban Doers also more likely to say this (29% difference) and Camp also more likely to say this (25% difference)</p>
<p><b>2.8 times</b> more likely to say <b>Availability of equipment fuel/ electricity/ clean water &amp; appliances to prepare food</b> makes it <b>easier</b> to eat an extra meal (p=0.022)</p> <p>*Urban Doers also <b>5.8 times</b> more likely to say this (p=0.004)</p>
<p>More likely to say <b>NGO supporting with food baskets</b> makes it <b>easier</b> to eat an extra meal (18% difference)</p> <p>*Camp Doers also more likely to say this (25% difference)</p>
<p><b>3 times</b> more likely to say <b>Market close to the house</b> makes it <b>easier</b> to eat an extra meal (p=0.049) (Camp)</p>
<p>More likely to say <b>Availability of food at the house</b> makes it <b>easier</b> to eat an extra meal (16% difference) (Camp)</p>
<p><b>3.4 times</b> more likely to say <b>Encouragement from husband to eat extra meal</b> makes it <b>easier</b> to eat an extra meal (p=0.026) (Urban)</p>
<p><b>6.1 times</b> more likely to say <b>Mother is not sick</b> makes it <b>easier</b> to eat an extra meal (p=0.02) (Urban)</p>
<p><b>12 times</b> more likely to say <b>Having organized meals helps eating an extra meal</b> makes it <b>easier</b> to eat an extra meal (p=0.049) (Urban)</p>
<p>More likely to say <b>Mother is not stressed</b> makes it <b>easier</b> to eating an extra meal (24% difference) (Urban)</p> <p>*Camp Doers also more likely to say this (29% difference)</p>
<p><b>2.1 times</b> more likely to say <b>Doesn't have appetite</b> makes it <b>difficult</b> to eat an extra meal (p=0.045)</p> <p>*Camp Doers also <b>18.9 times</b> more likely to say this (p=0.000)</p>
<p>More likely to say <b>Food is not available at the house</b> makes it <b>difficult</b> to eat an extra meal (19% difference) (Camp)</p>
<p>More likely to say <b>Lack of enough time to make food (having other kids, HH duties) makes her forget HH duties</b> makes it <b>difficult</b> to eat an extra meal (20% difference) (Urban)</p>
<p>More likely to say <b>Mother is tired and her body doesn't accept food</b> makes it <b>difficult</b> to eat an extra meal (24% difference) (Urban)</p>

	<p>More likely to say <b>No privacy living with relatives</b> makes it <b>difficult</b> to eat an extra meal (39% difference) (Urban)</p> <p>*Camp Doers also <b>3.1 times</b> more likely to say this (p=0.047)</p>
<b>Non-Doers</b>	<p>More likely to say <b>Having enough time to eat</b> makes it <b>easier</b> to eat an extra meal (17 difference) (Urban)</p>
	<p><b>3 times</b> more likely to say <b>Mother is sick/ vomiting/ pregnancy pressure/ stomach pain</b> makes it <b>difficult</b> to eat an extra meal (p=0.026)</p> <p>*Urban Non-Doers also <b>13.4 times</b> more likely to say this (p=0.009)</p>
	<p><b>4.3 times</b> more likely to say <b>Markets are far</b> makes it <b>difficult</b> to eat an extra meal (p=0.003)</p> <p>*Urban Non-Doers also more likely to say this (25% difference) and Camp <b>4.8 times</b> more likely to say this (p=0.041)</p>
	<p>More likely to say <b>Not having enough money to buy food</b> makes it <b>difficult</b> to eat an extra meal (16% difference)</p> <p>*Urban Non-Doers also more likely to say this (16% difference)</p>
	<p>More likely to say <b>Displacement regularly from one place to another</b> makes it <b>difficult</b> to eat an extra meal (16% difference) (Camp)</p>
	<p><b>7.8 times</b> more likely to say <b>No privacy living with relatives</b> makes it <b>difficult</b> to eat an extra meal (p=0.005) (Urban)</p>
	<p>More likely to say <b>NGO's don't support with food baskets to everyone</b> makes it <b>difficult</b> to eat an extra meal (17% difference) (Urban)</p>

Overall, the results indicate that facilitators for Doers include having a supportive husband, availability of food in the house and accessible markets, kitchen appliances to store and cook food, organized meals, advice from nutrition workers, supported by NGO food basket distribution, and finally the Mother having an appetite, not being stressed or sick. Doers indicated several barriers, while it is not necessary to address many of these since these Mother's are already practicing the behavior, it is important to address the barriers related to lack of availability of food in the house or the mother being too tired or lacking an appetite to eat an extra meal. Non- Doers are more likely to point to barriers such as pregnancy- related sickness (vomiting, pressure, stomach pain), markets being far away, lack of money to buy foods, no privacy, not having enough time to cook food, not receiving NGO food baskets and regular displacement. These results highlight the need to work with the Food Security Sector in order to assess accessibility, availability and affordability of food in project locations. It is also critical to expand the food basket distribution. Further, it is important to counsel Mothers on how to manage pregnancy related sickness, as well as proper time

management in meal preparation. It is also important to convey to mothers that regardless of regular displacement, the importance of ensuring they eat an extra meal during their pregnancy.

**SOUTH SYRIA**

<b>Doers</b>	<b>3.4 times</b> more likely to say <b>Encouragement from family and community to eat more food</b> makes it <b>easier</b> to eat an extra meal (0.001)
	More likely to say <b>Food is available at the house</b> makes it <b>easier</b> to eat an extra meal (16% difference)
	More likely to say <b>Financial issues, not having money to buy food</b> makes it <b>difficult</b> to eat an extra meal (16% difference)
<b>Non-Doers</b>	<b>4 times</b> more likely to say <b>If no pregnancy related sickness</b> makes it <b>easier</b> to eat an extra meal (0.005)
	<b>7.4 times</b> more likely to say <b>Being stressed due to displacement (forced to move from home)</b> makes it <b>difficult</b> to eat an extra meal (0.027)

In the South, Doers indicate that encouragement from family and availability of food in the house help them eat an extra meal, while Non- Doers indicate lack of pregnancy related sickness makes it easier. Non-Doers state that the stress due to displacement causes a barrier to the proper practice of the behavior. It is critical for Cluster programmers to continuously assess needs as each wave of displaced individuals resettle in program areas.

**Perceived Positive or Negative Consequences**

*Respondents were asked what are (or what would be) the advantages/ disadvantages of eating an extra meal each day while pregnant.*

**NORTH SYRIA**

<b>Key Finding</b>	
<b>Doers</b>	<b>2.4 times</b> more likely to say <b>Mother doesn't get sick</b> is an <b>advantage</b> of eating an extra meal (p=0.017)  *Urban Doers also more likely to say this (19% difference) and Camp Doers <b>5.1</b> more likely to say this (p=0.015)
	More likely to say <b>Provide the mother with more vitamins and nutrients</b> is an <b>advantage</b> of eating an extra meal (16% difference)  *Urban Doers also more likely to say this (25% difference)
	<b>3.3 times</b> more likely to say <b>Mother more active and has increased mobility</b> is an <b>advantage</b> of eating an extra meal (p=0.041) (Camp)



	More likely to say <b>Giving birth to a healthy and good baby</b> is an <b>advantage</b> of eating an extra meal (20% difference) (Camp)
	<b>4.5 times</b> more likely to say <b>Mother doesn't get tired</b> is an <b>advantage</b> of eating an extra meal (p=0.01) (Urban)
	More likely to say <b>Saving money by not visiting the doctor (ex: cause of no malnutrition)</b> is an <b>advantage</b> of eating an extra meal (15% difference) (Urban)
	<b>2.1 times</b> more likely to say <b>Feeling lazy and no desire to move</b> is an <b>disadvantage</b> of eating an extra meal (p=0.045)  *Camp Doers <b>5.1 times</b> more likely to say this (p=0.014)
	More likely to say <b>Mother gains more weight</b> is an <b>disadvantage</b> of eating an extra meal (17% difference) (Urban)
	More likely to say <b>Certain kinds of food increase blood pressure</b> is an <b>disadvantage</b> of eating an extra meal (19% difference) (Urban)
<b>Non-Doers</b>	<b>3.2 times</b> more likely to say <b>Helps for a better growing/ healthy fetus</b> is an <b>advantage</b> of eating an extra meal (p=0.007)  *Urban Non- Doers <b>2.1 times</b> more likely to say this (p=0.000)
	More likely to say <b>Mother doesn't get tired</b> is an <b>advantage</b> of eating an extra meal (21% difference) (Camp)
	More likely to say <b>Mother gains more weight</b> is an <b>disadvantage</b> of eating an extra meal (15% difference) (Camp)
	More likely to say <b>Fear of getting stomach sickness</b> is an <b>disadvantage</b> of eating an extra meal (25% difference) (Urban)

Overall, Doers understood the advantages of eating an extra meal during pregnancy, such as it provides more vitamins/ nutrients, increases mobility/ activity, prevents tiredness and has economic benefits because it reduces doctor visits. Doers and Non-Doers were likely to state that a disadvantage of an extra meal was that the mother gains weight. Additional disadvantages stated by Non- Doers and Doers include the fear of getting sick, feeling lazy and certain foods increasing blood pressure, suggest that Mother's need more detailed counseling about maternal nutrition in order to convey correct information and methods to manage sickness and understand benefits.

### SOUTH SYRIA

<b>Doers</b>	<b>9 times</b> more likely to say <b>Prevents mother from losing calcium in body</b> is an <b>advantage</b> of eating an extra meal (p=0.000)
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	<p><b>12.1 times</b> more likely to say <b>Mother has a healthy pregnancy without any troubles</b> is an <b>advantage</b> of eating an extra meal (p=0.001)</p>
	<p><b>2.7 times</b> more likely to say <b>Stomach pain and colic/ bloating/ full feeling/ constipation</b> is a <b>disadvantage</b> of eating an extra meal (p=0.026)</p>
	<p><b>4.7 times</b> more likely to say <b>Fetus gains weight</b> is a <b>disadvantage</b> of eating an extra meal (p=0.000)</p>
	<p><b>11.5 times</b> more likely to say <b>Certain types of food give allergy</b> is a <b>disadvantage</b> of eating an extra meal (p=0.007)</p>
	<p><b>12.1 times</b> more likely to say <b>Spending more time in the kitchen</b> is a <b>disadvantage</b> of eating an extra meal (p=0.001)</p>
	<p>More likely to say <b>Gaining weight (Mother)</b> is a <b>disadvantage</b> of eating an extra meal (16% difference)</p>
<b>Non-Doers</b>	<p><b>9.6 times</b> more likely to say <b>Gives mother nutrients that are lost during pregnancy</b> is an <b>advantage</b> of eating an extra meal (p=0.000)</p>
	<p>More likely to say <b>Prevents malnutrition in mother</b> is an <b>advantage</b> of eating an extra meal (16% difference)</p>
	<p><b>4 times</b> more likely to say <b>No disadvantages</b> (p=0.000)</p>

In the South, it is interesting to note that the Doer Mothers were more likely to list disadvantages than Non- Doers. Since they are already practicing the behavior, there would normally be no need to address these factors, however since many of them are based on incorrect knowledge, it is important to further counsel Mothers in order to dispel any existing misconceptions regarding pregnancy- related sickness, effects of an extra meal on the fetus and the mother.

### Perceived Social Norms

*Respondents were asked who are the people that approve or disapprove of them eating an extra meal each day while pregnant.*

### NORTH SYRIA

<b>Key Findings</b>	
<b>Doers</b>	<p><b>4.1 times</b> more likely to say <b>Husband</b> approves of her eating an extra meal (p=0.019)</p> <p>*Urban Doers also more likely to say this (17% difference) and Camp Doers <b>4.8 times</b> more likely to say this (p=0.041)</p>
	<p>More likely to say <b>Sister approves</b> of her eating an extra meal (20% difference) (Camp)</p>
	<p>More likely to say <b>Sister-in-law approves</b> of her eating an extra meal (19% difference) (Camp)</p>

	More likely to say <b>Nutrition and Health worker approves</b> of her eating an extra meal (15% difference) (Urban)  *Camp Doers also more likely to say this (16% difference)
	<b>6 times</b> more likely to say <b>Sister disapproves</b> of her eating an extra meal (p=0.008)  *Urban Doers also <b>13.4 times</b> more likely to say this (p=0.009)
	<b>5.3 times</b> more likely to say <b>Neighbor disapproves</b> of her eating an extra meal (p=0.042) (Urban)
	More likely to say <b>Sister-in-law disapproves</b> of her eating an extra meal (19% difference) (Urban)
	More likely to say <b>2nd wife disapproves</b> of her eating an extra meal (18% difference) (Urban)
<b>Non-Doers</b>	More likely to say <b>Father-in-law would approve</b> of her eating an extra meal (17% difference) (Urban)
	<b>3 times</b> more likely to say <b>No One would disapprove</b> of her eating an extra meal (p=0.049) (Urban)

Doers indicated that husbands, sister’s, sister-in-law’s, and nutrition/ health workers approve of eating an extra meal during pregnancy. Increasing the involvement of these influential groups in nutrition activities may have a positive influence on Mother’s. Doers also indicated that neighbors, 2<sup>nd</sup> wives, sister-in-law’s and sister’s disapprove of the practice, however since these particular Mother’s are already practicing the behavior it is unlikely that these influential groups are serving as barriers. Non-Doers indicated that Father-in-law’s approve of Mother’s eating an extra meal, which is another influential group that should be involved in nutrition activities.

### SOUTH SYRIA

<b>Doers</b>	<b>5.2 times</b> more likely to say <b>Mother-in-law approves</b> of her eating an extra meal (p=0.000)
	<b>14.1 times</b> more likely to say <b>No one approves</b> of her eating an extra meal (p=0.000)
	More likely to say <b>Grandmother approves</b> of her eating an extra meal (15% difference)
	More likely to say <b>Mother disapproves</b> of her of her eating an extra meal (29% difference)
	More likely to say <b>Mother-in-law disapproves</b> of her eating an extra meal (67% difference)
	More likely to say <b>Father disapproves</b> of her of her eating an extra meal (19% difference)
	More likely to say <b>Grandmother disapproves</b> of her of her eating an extra meal (15% difference)

<b>Non-Doers</b>	<b>8.1 times</b> more likely to say <b>Doctor</b> would <b>approve</b> of her eating an extra meal (p=0.000)
	More likely to say <b>Husband</b> would <b>approve</b> of her eating an extra meal (p=0.000)
	More likely to say <b>No one</b> would <b>disapprove</b> of her eating an extra meal (45% difference)

In the South, Doers indicated that mother-in-law’s and grandmother’s approve of eating an extra meal during pregnancy, while Non- Doers indicated that doctor’s and husband’s would approve. While Doers stated that mother’s mother-in-law’s, father’s and grandmother’s disapprove, it is unlikely that these influential groups are serving as barriers.

### Perceived Access

*Respondents were asked how difficult it is to get the things they need to eat an extra meal each day while pregnant.*

Overall, in the North, all Non-Doers were **3.8 times** more likely to indicate that it was **Very Difficult** (p=0.015) to get the things they need to eat an extra meal. Camp Doers were more likely to state that it was **Somewhat Difficult** (20% difference). Urban Non-Doers were **21.6 times** more likely to indicate that it was **Very Difficult** (p=0.001) and Doers were **6.8 times** more likely to indicate that it was **Not Difficult At All** (p=0.010).

In the South, Non-Doers were **11.3 times** more likely to indicate that it was **Very Difficult** (p=0.003) to get the things they need to eat an extra meal, while Doers were **3.4 times** more likely to say **Not Difficult At All** (p=0.001).

These results in both the North and South highlight the need to increase a mother’s ability to get the thing’s needed to prepare an extra meal during their pregnancy.

### Perceived Cues for Action / Reminders

*Respondents were asked how difficult it is to remember to eat an extra meal each day while they are pregnant.*

Doers in Camps were more likely to state that it was **Somewhat Difficult** (24% difference) to remember to eat an extra meal, while Non-Doers were more likely to say it was **Very Difficult** (17% difference). Urban Non-Doers were **13.3 times** more likely to state that it was **Somewhat Difficult** (p=0.050) and Doers were more likely to state that it was **Not Difficult At All** (20% difference).

In the South, Non-Doers were **2.6 times** more likely to indicate that it was **Somewhat Difficult** (p=0.019) to remember to eat an extra meal, while Doers were **3.4 times** more likely to say **Not Difficult At All** (p=0.002).

These results in both the North and South highlight the need to provide ways to remind mother’s to eat an extra meal during their pregnancy.

### Perceived Susceptibility/ Risk

*Respondents were asked how likely it is that their baby will be born too weak and small.*

In the North, all Non-Doers were **2.7 times** more likely to indicate that it was **Very Likely** ( $p=0.026$ ) for their child to be born weak and small, while Doers were **2.4 times** more likely to indicate that it was **Not Likely At All** ( $p=0.042$ ). Urban Non-Doers were **10.3 times** more likely to also indicate that it was **Very Likely** ( $p=0.004$ ), while Doers were **6.1 times** more likely to indicate that it was **Not Likely At All** ( $p=0.004$ ).

In the South, Non-Doers were **3.8 times** more likely to indicate that it was **Very Likely** ( $p=0.013$ ) for their child to be born weak and small.

These results highlight the fact that Non- Doers think their children are at higher risk of being born weak and small.

### Perceived Severity

*Respondents were asked how serious would it be if their baby will be born too weak and small.*

Camp Doers were more likely to say it was **Very Serious** (15% difference) if their baby will be born too weak and small. Urban Non-Doers were more likely to say it was **Very Serious** (20% difference). These results demonstrate that Doers and Non- Doers seem to understand the severity of a baby being born too weak or small.

### Perceived Action Efficacy

*Respondents were asked if eating an extra meal will ensure they give birth to a healthy baby.*

In the North, all Doers were more likely to indicate that it is **Very Likely** (18% difference) to give birth to a healthy baby if they ate an extra meal, while Non-Doers were **3 times** more likely to indicate that it was **Somewhat Likely** ( $p=0.044$ ). Camp Doers were also more likely to say it is **Very Likely** (25% difference), while Non-Doers were more likely to say **Somewhat Likely** (17% difference). Urban Doers were more likely to say that it is **Very Likely** (20% difference), while Non-Doers were more likely to say **Somewhat Likely** (20% difference) and **Not Likely At All** (27% difference).

In the South, Non-Doers were **2.1 times** more likely to indicate that it was **Very Likely** ( $p=0.039$ ) to give birth to a healthy baby if they ate an extra meal.

These results highlight the fact that Non- Doers do not fully understand the relationship between eating and extra meal and giving birth to a healthy baby, something which should be addressed in awareness raising campaigns or counseling.

### Divine Will

*Respondents were asked if they thought God wants them to eat an extra meal each day during pregnancy.*

Urban Doers were more likely to say **No** (20% difference) it is not God's Will to eat an extra meal, while Non-Doers were more likely to say **Yes** (27% difference). In the South, Doers were **3.4 times** more likely to say **Yes** ( $p=0.022$ ) it is God's Will, while Non-Doers were more likely to say **No** (16% difference).

## Culture

*Respondents were asked if there are any cultural rules or taboos against eating an extra meal each day while you are pregnant.*

Doers were more likely to say **No** (33% difference) there are no cultural rules or taboos, while Non-Doers were **13.3 times** more likely to say **Yes** ( $p=0.007$ ). Since Non-Doers indicate that there are cultural rules and taboos against eating an extra meal, it is important to further investigate these findings to confirm if this is indeed correct.

## Recommendations

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This assessment represents the first Barrier Analysis to ever be conducted in Syria. The assessment was requested by UNICEF in hopes that the findings could strengthen the programming efforts of the entire Nutrition Cluster in both Northern and Southern Syria. Currently, IYCF programming in Syria is not tailored according to barriers and facilitators, therefore it is expected that these recommendations will ensure improved quality programming, the gradual adoption of behaviors that were considered low in prevalence and the ultimate improvement in maternal and child nutritional status.

These results highlight the fact that lack of knowledge is not always the main barrier, but access to IYCF services, as well as access to other sectoral services, are required in order to improve these promoted behaviors. It is hoped that these results will allow programs to be better tailored to address barriers, as well as focus attention on the need for increased integration of IYCF programming activities into other Sectors, particularly Food Security, Agriculture, Livelihoods and Reproductive Health. Integration into other Sectors is not only critical to ensure increased coverage of targeted mothers and harmonized efforts in programming and messaging in related activities, but also in providing a comprehensive approach to accomplishing behavior change in regards to complex behaviors in an emergency context.

To address the significant determinants of each behavior, the Barrier Analysis assessment team developed Bridges to Activities and Recommended Activities which were presented through a results workshop and also presented to Cluster members in order to receive feedback to be incorporated into the recommendations below. Although these recommendations are specific to particular Districts in the North and South, activities will also likely benefit all similar programming locations in both Northern and Southern regions.

Three key activities are recommended as part of implementing the activities below. These apply for each of the three behaviors.

- 1) Recommended messages and talking points below require capacity building efforts by partners in order to ensure that health providers, community health workers, nutrition counselors and other service providers all deliver the same correct information. Similarly all materials should be reviewed and revised to reflect the same information in order to ensure harmonization.

- 2) Scale-up of IYCF and maternal nutrition programming is critical in order to lead to significant behavior change of the population. Proven approaches such as Mother Support Groups, especially Care Groups, should be expanded to increase access and coverage. Groups should follow a specific model so that they can equitably reach every beneficiary household, provide a structure for a community health information system, and provide improved monitoring of Mother’s and households. The educational and practical nature of these support groups will increase the likelihood of behavior change in the communities that are being targeted.
- 3) It is critical for Nutrition Cluster partners to continuously assess the needs and access to markets and services as each wave of displaced individuals resettle in program areas.

**Behavior 1: Mothers of children (ages 0- 5 months) who exclusively breastfeed**

Determinant	Bridges to Activities	Recommended Activity
<p><b>Perceived Self- Efficacy</b></p>	<p>Increase perception that Mother’s correct knowledge of IYCF will make it easier to EBF</p>	<p>➤ <b>Increase access and coverage of IYCF education and support through one-on-one counseling, skilled support and educational/ support sessions (ex: health facilities including ANC/PNC services) and discuss the following topics:</b></p> <ul style="list-style-type: none"> <li>- Discuss benefits of EBF, such as: better baby growth/ weight, intelligence, immunity, better bonding between mother and child, better sleep for baby, and economic savings.</li> <li>- Provide specific information on the dangers of non-EBF (ex: malnutrition, diarrhea) and the severity of babies being malnourished or getting diarrhea</li> <li>- Address perceptions of inadequate milk supply and unsatisfied baby: explain that breast milk is sufficient to meet the nutritional needs and to satisfy the baby and that most mothers are able to produce sufficient breastmilk</li> <li>- Provide correct maternal nutrition information. Explain that mothers can still produce milk even if they are hungry/ don’t eat enough food. EBF will not lead to negative impacts to a mother’s health (loss of weight, illness/ disease, loss of calcium/ hair/ immunity.</li> <li>- Address perceptions of breast problems, babies unable to suckle: one-on-one support should include assessment of the breastfeeding mother and child, and</li> </ul>
	<p>Increase Mother’s perception that baby will be immunized as a result of EBF</p>	
	<p>Increase perception that Mothers can produce enough breast milk/ will have continuous availability of milk</p>	
	<p>Increase the perception that babies are satisfied and nourished by breastmilk alone</p>	
	<p>Increase perception that if mother breastfeeds frequently then baby will stop crying</p>	
	<p>Increase perception of Mother’s that there is no need to prepare milk/ no time needed to prepare milk</p>	
	<p>Reinforce perception that “Breastmilk is free”/ “Breastmilk</p>	

saves money to pay for other things”	<p>support for mothers experiencing difficulties and referral of complications (issues with positioning and attachment, milk production and breast feeding frequency, breastfeeding on demand, etc)</p> <p>- Advise Mothers on manual expression or pumping of breastmilk. Show videos when possible</p> <p>- Address misconceptions, such as:</p> <ul style="list-style-type: none"> <li>• EBF changes breast shape, explain that previous shape will return after breastfeeding</li> <li>• Breastmilk does not cause colic or stomach problems. Advocate for IMCI in all health facilities</li> <li>• Baby will <u>not</u> get diseases if mother takes specific types of food. Explain that specific types of food (ex: bulgar, cows milk, etc) will not cause sickness</li> <li>• Infections from a sick Mother will not be passed through the breastmilk to the child</li> <li>• Anemic mothers should not stop EBF because EBF helps anemic mothers to delay menstrual cycle.</li> </ul> <p>➤ <b>Refer mothers for nutrition assessment, micronutrient supplementation and food security interventions as needed. Ensure referral/ treatment of anemic mothers.</b></p> <p>➤ <b>Provide referral and treatment of babies with candida of the mouth. Increase awareness of signs/ symptoms and what to do</b></p> <p>➤ <b>Integration of activities with Midwives and Reproductive Health (RH) services to build capacity on recognizing and overcoming issues with breastfeeding. Include correct IYCF and maternal nutrition education during ANC/ PNC visits.</b></p> <p>➤ <b>Develop educational materials (ex: pictorials as reminders) and mass messaging (including mHealth) for behavior change promotion on maternal</b></p>
Increase perception that babies like being breastfed	
Reduce perception that Mother’s cannot EBF if experiencing breast problems/ pain in breasts / inflammation in nipple	
Reduce perception that exclusive breastfeeding changes the shape of breasts	
Increase the perception that babies are able to suckle effectively	
Increase ability of babies to accept Mother’s breast	
Reduce perception that anemia will make it difficult to EBF	
Reinforce the perception that good nutrition (enough and diverse food) makes EBF easier	
Increase Mother’s ability to access diverse foods	
Increase the perception that families (husbands) are supportive of EBF and will not object	
Increase ability of Mother’s to EBF even when they are working outside the house	
Increase the ability of Mother’s to have privacy to breastfed baby	
Increase the ability of Mother’s to be relaxed so that they can breastfeed	



	Reduce perception that baby is unable to EBF if has candida of the mouth	<p><b>nutrition and EBF. Include tailored messaging below.</b></p> <p>➤ <b>Provide tailored messaging for IYCF materials and talking points for all service providers (including doctors, pharmacists, community health workers, other sectors such as food security and RH) to deliver accurate information during counseling or educational sessions, such as:</b></p> <ul style="list-style-type: none"> <li>- <i>A Mother's correct knowledge of IYCF will make it easier to exclusively breastfeed her baby</i></li> <li>- <i>Babies are satisfied and nourished by breastmilk alone</i></li> <li>- <i>The amount of breastmilk produced is according to the need of the baby</i></li> <li>- <i>Mother's who breastfeed frequently will have babies that do not cry as much</i></li> <li>- <i>There is no time needed to prepare breastmilk</i></li> <li>- <i>"Breastmilk is free"</i></li> <li>- <i>"Breastmilk saves money to pay for other things"</i></li> <li>- <i>Exclusive breastfeeding saves money, unlike formula which costs money</i></li> <li>- <i>Babies like being breastfed</i></li> <li>- <i>Breastfeeding is unlikely to permanently change the shape of a mother's breast</i></li> <li>- <i>Babies that exclusively breastfeed will be healthy</i></li> <li>- <i>Exclusive breastfeeding protects babies from diseases and provides immunity</i></li> <li>- <i>Exclusive breastfeeding results in the good growth and weight of babies</i></li> <li>- <i>Children that exclusively breastfeed will be more intelligent</i></li> </ul>
	Reduce perception that breastmilk causes stomach problems and colic	
	Reduce perception that a sick Mother cannot EBF	
<b>Perceived Positive &amp; Negative Consequence</b>	Reinforce perception that an advantage of EBF is that it Protects babies from diseases/ immunity	
	Increase perception that an advantage of EBF is that Baby will be healthy	
	Increase perception that an advantage of EBF is Good baby growth/ weight	
	Increase perception that an advantage of EBF is that the child will be more intelligent	
	Increase perception that an advantage of EBF is that there will be better bonding between mother & child	
	Increase perception that an advantage of EBF is that the baby is comfortable and sleeps well	
	Reinforce the perception that EBF saves money unlike formula	
	Reduce the perception that a mother will lose weight and lead to illness/ disease if she EBFs	
	Reduce the perception that EBF is a waste of time and that there is no time to do other work	

	Reduce the perception that the baby will get diseases if the mother takes specific types of food	- <i>Exclusive breastfeeding leads to better bonding between mother &amp; child</i>
	Reduce the perception that EBF causes a baby to keep crying and remain hungry	- <i>An exclusively breastfed baby is comfortable and sleeps well</i>
	Reduce the perception that EBF will negatively affect Mothers health	- <i>Non- exclusively breastfed babies can become malnourished and can get diarrhea</i>
	Reduce the perception that EBF will lead to Family problems (ex: not giving attention to the husband)	- <i>It is a very serious problem if your baby becomes malnourished. It is a very serious problem if your baby gets diarrhea</i>
<b>Perceived Social Norms</b>	Increase perception that Sister-in-laws, Doctors/ Pharmacists, community health workers, Neighbors approve of EBF	- <i>If you exclusively breastfeed your child it is less likely for them to become malnourished or get diarrhea</i>
	Reduce the perception that Mothers disapprove of EBF	- <i>Exclusive breastfeeding will not cause a mother to lose weight leading to illness/ disease</i>
	Reduce the perception that Mother-in-laws disapprove of EBF	- <i>Exclusive breastfeeding is <u>not</u> a waste of time!</i>
<b>Perceived Access</b>	Increase the support Mother's need to give only breastmilk	- <i>Exclusive breastfeeding will not negatively impact a mother's health (ex: loss of hair, calcium, immunity, cause dizziness)</i>
	Increase the ability of Mother's to remember to only breast milk for the first 6 months	- <i>Mother's can still breastfeed if they are anemic</i>
<b>Perceived Cues for Action / Reminders</b>	Increase the support Mother's need to give only breastmilk	- <i>Sister-in-laws, Doctors/ Pharmacists, Community Health Workers, Neighbors approve of EBF</i>
	Increase the ability of Mother's to remember to only breast milk for the first 6 months	- <i>Exclusive breastfeeding will not cause problems in the family but will make a family closer because of the benefits to the baby</i>
<b>Perceived Severity</b>	Increase the perception that it is very serious if a baby is malnourished	➤ <b>Reinforce and advocate for International Code of Marketing of Breastmilk Substitutes</b>
	Increase the perception that it is very serious if a baby gets diarrhea	- Discuss with physicians about not encouraging infant formula and instead to counsel Mother's on proper practices
<b>Perceived Susceptibility/ Risk</b>	Increase the perception that non exclusively breastfed babies can become malnourished	➤ <b>Conduct food security assessments and interventions (market analysis) to determine access, food availability and diversity, etc.</b>
	Increase the perception that non exclusively breastfed babies can get diarrhea	➤ <b>Increase referrals and coverage of PLWs to food distribution and rations. Ensure such services are</b>

		<p><b>extended to mothers that are living alone/ whose husbands are away from the house</b></p> <ul style="list-style-type: none"> <li>➤ <b>Setup baby friendly spaces in various locations in the community (ex: health facilities) to give privacy to breastfeeding mothers. Setup wet feeding in camps.</b></li> <li>➤ <b>Referral and treatment of stressed Mother’s to psychosocial activities. Provide psychosocial activities to reduce stress amongst Mother’s</b></li> <li>➤ <b>Hold discussions with families through house visits/ counseling/ community outreach/ mother support groups sessions about how to support Mothers to EBF. Hold group sessions with husbands (use male CHWs to target husbands), mothers and mother-in-law’s. Discuss following topics:</b> <ul style="list-style-type: none"> <li>- Benefits of EBF</li> <li>- How to help mothers to ensure that she has time to EBF</li> <li>- Families to ensure mothers are not stressed and relaxed in order to EBF</li> </ul> </li> </ul>
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**Behavior 2: Mothers of children 6 – 23 months feed a diverse diet to their children containing foods from at least 4 of the 7 food groups per day**

<b>Determinant</b>	<b>Bridges to Activities</b>	<b>Recommended Activity</b>
<b>Perceived Self-Efficacy</b>	Increase perception that a child that loves and wants food makes it easier to feed a child a diverse diet	➤ <b>Conduct food security assessments and interventions (market analysis) to determine access, food availability and diversity, etc</b>
	Increase the perception that having enough time makes it easier to feed a child a diverse diet	➤ <b>Conduct assessment of infrastructure (electricity, food storage, water access, etc)</b>
	Increase perception that advice from nutrition counsellors, health worker and doctors makes it easier to feed a child a diverse diet	➤ <b>Create Community or Home Gardens and establish Mobile Markets to increase access and availability to diverse foods</b>

	Increase the perception that a child who only likes to eat junk food and not nutritious food makes it difficult to feed a child a diverse diet	<ul style="list-style-type: none"> <li>➤ <b>Provision of cash/ food vouchers, especially in times of electricity outages</b></li> <li>➤ <b>Expand food basket distribution, including expanding of distribution of fresh foods to nutritionally vulnerable groups (Under 2, PLW's, etc)</b></li> <li>➤ <b>Expand coverage of IYCF education and support through one-on-one counseling, mother support group sessions, etc and discuss the following topics:</b> <ul style="list-style-type: none"> <li>- Diverse food groups and importance of nutritious foods compared to junk food</li> <li>- Provide specific information on the dangers of not feeding a child a diverse diet (malnutrition) and the severity of children being malnourished</li> <li>- FATVAH (frequency, texture, variety, active feeding and hygiene) and timely introduction of foods</li> <li>- Use guidelines for sick child feeding- thyroid or throat issues should not stop feeding child a diverse diet. Share recipes for foods to feed sick child.</li> <li>- Develop and share recipes using locally available foods</li> <li>- Conduct cooking demonstrations using developed recipes</li> <li>- Meal planning for Mother's to become more efficient with time</li> <li>- WASH practices for individual hygiene and food preparation. Discuss household level chlorination</li> </ul> </li> <li>➤ <b>Develop educational materials (ex: pictorials as reminders) and mass messaging (including mHealth) for behavior change promotion on diet diversity. Ensure brochures include information and explanation of different food groups that are locally available. Include tailored messaging below.</b></li> </ul>
	Reduce the perception that if a child is sick/ has thyroid issues it will make child eat less	
	Reduce the perception that a child doesn't accept diverse foods	
	Increase the perception that family support (emotional and physical) and encouragement makes it easier to feed a child a diverse diet	
	Increase the ability of Mother's to have enough time to provide a diverse diet to their children	
	Increase the ability of Mother's to have diverse foods in the house	
	Increase ability of Mother's to be able to afford to buy diverse foods	
	Increase ability of Mother's to access Markets	
	Increase availability of diverse foods in the market	
	Increase ability of Mother's to be able to cook diverse meals through accessibility to fuel/ electricity, food storage	
<b>Perceived Positive and Negative Consequences</b>	Increase the perception that a diverse diet makes it less likely for a child to get diseases	
	Increase the perception that a diverse diet makes a child more	

	independent/ not as connected to the mother	<p>➤ <b>Provide tailored messaging for IYCF materials and talking points for all service providers (including nutrition counselors, health providers, other sectors such as food security, agriculture and livelihoods) to deliver accurate information during counseling or educational sessions, such as:</b></p> <ul style="list-style-type: none"> <li>- <i>A child that loves and wants food makes it easier to feed them a diverse diet</i></li> <li>- <i>Meal Planning helps Mother's feed a child a diverse diet</i></li> <li>- <i>Advice from nutrition counsellors, health workers and doctors makes it easier to feed a child a diverse diet</i></li> <li>- <i>It is better to feed a child nutritious food instead of junk food</i></li> <li>- <i>A child that is sick or has thyroid issues can still eat a diverse diet</i></li> <li>- <i>Children will happily accept diverse foods</i></li> <li>- <i>A diverse diet makes it less likely for a child to get diseases</i></li> <li>- <i>A diverse diet provides nutrients for the child's body</i></li> <li>- <i>A diverse diet helps teeth/ hair growth</i></li> <li>- <i>A diverse diet improves a child's intelligence (ex: talent, creativity)</i></li> <li>- <i>A diverse diet provides a child with more energy</i></li> <li>- <i>A diverse diet improves mobility of a child (ex: walking) and makes a child more active</i></li> <li>- <i>A diverse diet makes a child more independent/ not as connected to the mother</i></li> <li>- <i>A diverse diet increases a child's appetite/ thirst</i></li> <li>- <i>A diverse diet prevents anemia</i></li> </ul>
	Increase the perception that a diverse diet provides nutrients for the child's body	
	Increase the perception that a diverse diet improves child's intelligence (ex: talent, creativity)	
	Increase the perception that a diverse diet increases a child's appetite/ thirst	
	Increase the perception that a diverse diet improves mobility of child (ex: walking) and makes child more active	
	Increase the perception that a diverse diet provides a child with more energy	
	Increase the perception that a diverse diet prevents anemia	
	Increase the perception that a diverse diet makes a child more comfortable/calm and sleep better	
	Increase the perception that a diverse diet protects child from malnutrition	
	Reinforce the perception that a diverse diet helps teeth/ hair growth	
	Reduce the perception that a child gets sick/ food poisoning/ intestinal complications as a result of feeding a diverse diet	
<b>Perceived Social Norms</b>	Increase perception that Husbands, Mother-in-law's, Sister-in-law's, Grandmother's, Aunt's	

	and Doctor's, Community Health Workers approve of feeding a child a diverse diet	<ul style="list-style-type: none"> <li>- <i>A diverse diet protects a child from malnutrition</i></li> <li>- <i>Malnutrition is a very serious problem</i></li> <li>- <i>If children eat a diverse diet then they will not become malnourished</i></li> <li>- <i>It is <u>not</u> God's Will for children to become malnourished</i></li> <li>- <i>A child will not get sick/ food poisoning/intestinal complications as a result of eating a diverse diet</i></li> <li>- <i>It is not difficult at all to remember to include diverse foods when preparing a meal for your child</i></li> <li>- <i>Husbands, Mother-in-law's, Sister-in-law's, Grandmother's, Aunt's and Doctor's, Community Health Workers approve of feeding a child a diverse diet</i></li> </ul> <p>➤ <b>Educate families during support group sessions, house visits, community outreach about the importance of providing support and encouragement to Mother's to feed children a diverse diet. Discuss with families how they can help with meal preparation, feeding or other household chores in order to help mother make more time to feed child.</b></p> <p>➤ <b>Create group discussions with Aunts and Sisters to discuss the benefits of diverse diets and how they can be more supportive to Mothers</b></p>
	Reduce the perception that Aunts and Sister's disapprove of feeding a child a diverse diet	
<b>Perceived access</b>	Increase access to diverse foods	
<b>Perceived Cues for Action / Reminders</b>	Increase perception that it is not difficult at all to remember to include diverse foods	
<b>Perceived Susceptibility/ Risk</b>	Increase the perception that children not fed a diverse diet are at higher risk of becoming malnourished	
<b>Perceived Severity</b>	Reinforce the perception that malnutrition is very serious	
<b>Perceived Action Efficacy</b>	Increase the perception that if children eat a diverse diet then they will not become malnourished	
<b>Divine Will</b>	Reduce the perception that it is God's Will for children to become malnourished	

### Behavior 3: Pregnant woman consume an additional meal daily during pregnancy

<b>Determinant</b>	<b>Bridges to Activities</b>	<b>Recommended Activity</b>
<b>Perceived Self Efficacy</b>	Increase perception that advice from nutrition workers makes it easier to eat an extra meal	<ul style="list-style-type: none"> <li>➤ <b>Ensure rapid response by Cluster Partners to newly displaced Mothers (ex: ongoing needs assessments)</b></li> <li>➤ <b>Conduct food security assessments and interventions (market analysis) to determine access, food availability and diversity, etc.</b></li> </ul>
	Increase perception that Mother should still eat an extra meal if they are experiencing pregnancy-	

related sickness (sick/ vomiting/ pregnancy pressure and bloating/constipation/ stomach pain)	<ul style="list-style-type: none"> <li>➤ <b>Create Community or Home Gardens and establish Mobile Markets to increase access and availability to fresh fruits/ vegetables</b></li> <li>➤ <b>Establish income generating opportunities for vulnerable PLW families to be able to afford food for extra meal</b></li> <li>➤ <b>Provide Blanket Feeding for PLW's":</b> <ul style="list-style-type: none"> <li>- Increase referral, registration and distribution of food baskets to nutritionally vulnerable groups (Under 2, PLW's, etc)</li> <li>- Establish cash/ food voucher program</li> </ul> </li> <li>➤ <b>Setup mother and child friendly spaces in various locations in the community (ex: health facilities)</b></li> <li>➤ <b>Referral and treatment of stressed Mother's to psychosocial activities. Provide psychosocial activities to reduce stress amongst pregnant Mothers.</b></li> <li>➤ <b>Expand coverage of maternal nutrition education and support through one-on-one counseling, mother support group sessions, ANC/ PNC, link to NFI and WASH Cluster activities, and discuss the following topics:</b> <ul style="list-style-type: none"> <li>- Importance of eating an extra meal during pregnancy for mother and baby (benefits such as: prevents malnutrition, additional energy for Mother)</li> <li>- Healthy weight gain during pregnancy for both Mother and baby</li> <li>- Management of pregnancy- related symptoms (sick/ vomiting/ pregnancy pressure and bloating/constipation/ stomach pain): eating bland foods, small meals, etc</li> <li>- Importance of meal preparation to ensure enough time for Mother's</li> </ul> </li> </ul>
Increase perception that organized meal planning helps in having enough time to prepare and eat an extra meal	
Increase perception that even if a Mother doesn't have an appetite she should still eat an extra meal	
Increase the perception that if a Mother is tired that her body will still accept food	
Increase perception that Mother should still eat an extra meal if they are stressed (ex: due to displacement)	
Increase perception that husbands encourage Mother's to eat extra meal	
Increase the ability of Mother's to have privacy to prepare and eat and extra meal	
Increase the ability of Mother's to afford to buy food to make an extra meal	
Increase ability of Mothers to access Market	
Increase availability of food in the house	
Increase access to food baskets distributed by NGO's	
Increase availability of equipment and access to fuel/electricity/ clean water to prepare extra meal	

	Increase ability of Mother's to cope with regular displacement from one place to another and be able to make an extra meal	<ul style="list-style-type: none"> <li>- Food allergies- reality vs cultural</li> <li>- Eating certain kinds of food increases blood pressure- reality vs cultural</li> </ul>
<b>Perceived Positive/Negative Consequences</b>	Increase perception that eating an extra meal provides the mother with more vitamins and nutrients (ex: calcium)	➤ <b>Refer Mothers for nutrition assessment, micronutrient supplementation and food security interventions as needed</b>
	Increase perception that eating an extra meal makes Mothers more active and leads to increased mobility	➤ <b>Develop educational materials (ex: pictorials as reminders) and mass messaging (including mHealth) for behavior change promotion on maternal nutrition. Include tailored messaging below.</b>
	Increase perception that Mother's should eat an extra meal even if she is experiencing pregnancy related sickness	➤ <b>Provide <u>tailored messaging</u> for maternal nutrition materials and talking points for all service providers (including nutrition counselors, health providers, other sectors such as reproductive health, food security, agriculture and livelihoods) to deliver accurate information during counseling or educational sessions, such as:</b>
	Increase perception that eating an extra meal saves money and results in less Doctor visits (ex: for malnutrition)	- <i>Advice from nutrition workers makes it easier to eat an extra meal</i>
	Increase perception that eating an extra meal prevents malnutrition	- <i>Pregnant Mother's should ensure they still eat an extra meal even if they are experiencing displacement from their homes</i>
	Increase perception that eating an extra meal helps for a healthy pregnancy and better growing/ healthy fetus	- <i>Mothers can still eat an extra meal if they have pregnancy related sickness (ex: sick/ vomiting/ pregnancy pressure and bloating/constipation/stomach pain)</i>
	Increase perception that eating an extra meal leads to a healthy birth and healthy baby	- <i>Small healthy meals and bland foods will reduce feelings of pregnancy- related sickness</i>
	Reduce perception that eating an extra meal leads to a Mother getting tired	- <i>Organized meal planning helps in having enough time to prepare and eat an extra meal</i>
	Reduce perception that eating an extra meal leads to unnecessary weight gain in Mother	- <i>It is important to have enough time to make an extra meal</i>  - <i>Mothers should still eat an extra meal even if she doesn't have an appetite</i>



	Reduce perception that eating an extra meal leads to unnecessary weight gain in fetus	- A tired Mother's body will still accept food - Mothers should still eat an extra meal even if they are stressed
	Reduce perception that eating an extra meal makes a Mother feel lazy and no desire to move	- Husbands should encourage Mother's to eat an extra meal
	Reduce perception that eating certain kinds of food causes allergies	- Eating an extra meal while pregnant provides the mother with more vitamins and nutrients - Eating an extra meal while pregnant makes Mothers more active and leads to increased mobility
	Reduce perception that eating certain kinds of food increases Blood Pressure	- Eating an extra meal saves money and results in less Doctor visits for malnutrition
<b>Perceived Social Norms</b>	Increase perception that Husbands, Mother-in-law's, Grandmother's, Sisters, Sister-in-law's, Father-in-law's, Doctor's and Nutrition and Health workers approve of eating an extra meal	- Eating an extra meal while pregnant prevents malnutrition - Eating an extra meal while pregnant results in a healthy pregnancy and a healthy growing fetus - Eating an extra meal while pregnant leads to a healthy birth and healthy baby
<b>Perceived Access</b>	Increase access to get the things Mother's need to eat an extra meal each day	- A child is more likely to be born weak or small if the mother does not get extra food
<b>Perceived Cues for Action / Reminders</b>	Increase perception that it is Not Difficult At All to remember to eat an extra meal each day	- A weak or small infant is a serious problem - Eating an extra meal while pregnant increases a Mother's energy
<b>Perceived Susceptibility/ Risk</b>	Increase the perception that a child is more likely to be born weak or small if the mother does not get extra food	- Healthy weight gain with a healthy extra meal is important for pregnancy - Eating an extra meal while pregnant leads to healthy fetal weight gain
<b>Perceived Severity</b>	Increase the perception that a weak or small infant is a serious problem	- Husbands, Mother-in-law's, Grandmother's, Sisters, Sister-in-law's, Father-in-law's, Doctor's and Nutrition and Health workers approve of eating an extra meal during pregnancy
<b>Perceived Action Efficacy</b>	Increase the perception that eating an extra meal while pregnant will help ensure a healthy baby	

<b>Culture</b>	Increase the perception that eating an extra meal does not go against cultural rules or taboos	➤ <b>Involve Husbands and families in counseling/ group sessions. Discuss importance of encouragement and support for extra meal and how to make Mother’s feel comfortable. Discuss how extra meal is beneficial for the Baby.</b>
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All activities are designed to be based on Bridges to Activities and to be actionable, feasible, and relevant given the programming context in Syria. Cluster Partners should plan for several next steps to help ensure incorporation of activities into program work plans. Steps include 1) wide dissemination of findings among partners, UN agencies, and relevant working groups, 2) review and revision of current activities and materials according to recommendations, 3) development of plans for implementation of new recommendations into current or future programming, and 4) monitoring and evaluation of new and revised programming.