2019 NUTRITION SURVEY of Refugee Camps along the Thailand-Myanmar Border

Prepared by The Border Consortium
www.theborderconsortium.org

2019 NUTRITION SURVEY OF REFUGEE CAMPS ALONG THE THAILAND-MYANMAR BORDER

This report contains the following information:

ACRONYMS

ANC	Antenatal Clinic
AS	Angular Stomatitis
BCC	Behaviour Change Communication
BDY	Ban Don Yang
BMN	Ban Mai Nai Soi
BMS	Ban Mae Surin
CCSDPT	Committee for Coordination of Services to Displaced Persons in Thailand
CI	Confidence Interval
CMT	Community Managed Targeting
EBF	Exclusive Breastfeeding
FCS-N	Food Consumption Score – Nutritional Quality Analysis
GAM	Global Acute Malnutrition
GCM	Global Chronic Malnutrition
GM&P	Growth Monitoring and Promotion
HH	Households
HHS	Household Hunger Scale
ID	Iron Deficiency
IYCF	Infant and Young Child Feeding
MLA	Mae La
MLO	Mae La Oon
MRML	Mae Ra Ma Luang
MUAC	Mid-Upper Arm Circumference
MV	Most Vulnerable
NP	Nu Po
PDM	Post-Distribution Monitoring
TBC	The Border Consortium
SR	Self-Reliant
STD	Standard
SFP	Supplementary Feeding Programme
TFP	Therapeutic Feeding Programme
TH	Tham Hin
TPD	Total Population Database
UMP	Umpiem Mai
UNHCR	United Nations High Commissioner for Refugees
V	Vulnerable
WFP	World Food Programme
WHO	World Health Organization

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Finally, without the support of the refugee leaders and community members, conducting the biennial nutrition survey would not be possible. Our gratitude for the time and care you showed in prioritizing nutrition for the community.

DEFINITIONS AND BENCHMARKS

Malnutrition

TERM	MEASURE	CUTOFF (WHO)
Acute Malnutrition - Wasting		
global acute **(GAM)**	weight-for-height	<-2 z-scores
moderate acute		<-2 to ≥-3 z-scores
severe acute	w/h or edema	<-3 z-scores
Chronic Malnutrition - Stunting		
global chronic **(GCM)**	height-for-age	<-2 z-scores
moderate chronic		<-2 to ≥-3 z-scores
severe chronic		<-3 z-scores

WHO Classification: Global Acute Malnutrition

1995		2018	
severity	**prevalence in <5 population**	**severity**	**prevalence in <5 population**
acceptable	<5%	very low	<2.5%
poor	5-9%	low	2.5 - <5%
serious	10-14%	med	5 - <10%
critical	>15%	high	10 - <15%
		very high	≥15%

WHO Classification: Global Chronic Malnutrition

1995		2018	
severity	**prevalence in <5 population**	**severity**	**prevalence in <5 population**
low	<20%	very low	<2.5%
medium	20-29.9%	low	2.5 - <10%
high	30-39.9%	med	10 - <20%
very high	> 40%	high	20 - <30%
		very high	≥30%

Micronutrient Malnutrition

Angular stomatitis - presence of bilateral fissures on corners of mouth (fresh wounds or scars) as symptom of ariboflavinosis (vitamin B_2 deficiency).

Selective Feeding Programmes

Selective feeding programme enrolment rate – number children <-2 z-scores weight-for-height / number children <-2 z-scores weight-for-height enrolled in selective feeding programme during time of survey. Selective feeding programme enrolment rate should be >90% in formal camps (Sphere, 2018).

Vitamin A

Vitamin A coverage - number of children with record of receiving vitamin A dose within past six months / number of children screened. Vitamin A coverage should be >95% in children 6-59 months of age receive appropriate dose (Sphere, 2018).

EXECUTIVE SUMMARY

Background

In 2019, TBC and CCSDPT Health Agencies conducted the biennial nutrition survey of children 6-59 months of age in all nine camps in Thailand for refugees from Myanmar.

Methods

Random sampling was used to select households (HH) with children 6-59 months of age in all camps using TBC's Total Population Database (TPD). TBC trained health agency staff to implement surveys in all camps and supervised all surveys to completion. Data was analyzed using SPSS software (version 19). The WHO Child Growth Standards were used to report principal anthropometry results.

Results

A total of 3,780 children were surveyed in all nine camps.

Malnutrition Rates

An average of **2.2% of children surveyed were found with global acute (wasting) malnutrition borderwide. Wasting rates for children <five years of age remain stable and within the 'very low'** criteria (Graph 1.5) according to the World Health Organization (WHO) benchmarks (2018). Wasting in camps remains lower than in Thailand or Myanmar.

By age group, the highest rates of wasting malnutrition were found in children 6-23 months of age in all camps (Table 1.2), although this was only a small number of children (n=37).

Significant progress was achieved in reducing stunting with 6.0% reduction from 2017-2019 (15.0% reduction from 2013-2019). An average of **25.8% (range 13.6%-36.6% by camp borderwide) of children surveyed were found with global chronic (stunting) malnutrition.** In 2018, WHO updated criteria for population level categories. Previous criteria indicated stunting reached 'medium' (20 - <30%); however, the updated criteria now place 25.8% at a 'high' level (20 - <30%). BMN and UM are the two camps that are considered in the 'medium' level. Stunting in the camps is higher than in Thailand but lower than in Myanmar. Graph 1.6 highlights stunting prevalence in previous nutrition surveys conducted – it is evident that there is continued notable progress, and, in 2019 **every camp had a reduction in stunting.**

Feeding Practices

Maternal Nutrition

Most mothers reported attending the Antenatal Clinic (ANC) as soon as each knew she was pregnant **(94.2%).** Of first ANC visits, 76.8% were within one to three months of the pregnancy. Previously, 31.6% did not attend until ≥four months during the pregnancy, now improved to 21.3% in this survey (Table 1.7, by camp).

For maternal nutrition education, the **benefits of weight gain during pregnancy related to the mother's health were not well understood** (same as in previous survey); however, the benefits of weight gain during pregnancy as related to the child's health (promote child growth and development) were better understood (66.2% increased from 40.7% in 2017).

Also mirroring the 2017 survey, **food consumption during pregnancy was reported as best practised in relation to iron intake, and during breastfeeding, in relation to iron and amount of food consumed** (Graphs 1.9-2.2).

There was **high compliance for supplementation with iron, vitamin A and**

folic acid during pregnancy and breastfeeding at over 88.0% for each (range 88.0%-98.0%, Table 1.8), similar to 2017 (range 92.0%-98.0%).

Breastfeeding

Most (85.9%) followed the recommended practice for breastfeeding initiation (newborn put to the breast immediately or within one hour after birth) (81.0%, 2017).

The recommendation is to breastfeed until 24 months of age. It was found that the mean duration borderwide improved **from 13.0 months in 2017 to 20.9 months** (Table 1.9). Exclusive breastfeeding (EBF) (just breastmilk with no liquids or foods, including water) duration was 4.7 months (six months is recommended), with all camps except MRML improving since 2017 (Table 2.0).

Complementary Feeding

Complementary feeding initiation as recommended at six months of age improved since the 2017 survey, with feeding prior to six months decreased from 20.0% to only 13.0%. All camps showed an improvement, which has been sustained since the 2015 survey, after which the 'Healthy Babies, Bright Futures' IYCF programme was implemented Graph 2.4).

Micronutrient Deficiency – Riboflavin (Vitamin B2)

Of children surveyed, **0.9% (n=34) were diagnosed with angular stomatitis** (AS), a symptom of ariboflavinosis (vitamin B_2 deficiency; reduced from 1.9% or n=74 in 2017). While there is no Sphere criterion to indicate a problem of public health significance, AS continues to **decrease since 2013 when it was the highest of all the surveys, 3.8%** (Graph 2.6).

Supplementary/Therapeutic Feeding Programme (SFP/TFP) Enrolment

Feeding Programme **enrolment for moderate and severely wasted children was 26.7% and 28.6%**, respectively, indicating that not all malnourished children had been identified.

Vitamin A/De-worming

Vitamin A supplementation coverage has improved since 2007 when it was only at 25.1%. However, the coverage in 2019 was 59.7% compared to 72.8% in 2017 (Sphere standard is >95% of children <five years of age receive six monthly preventive doses; Graph 2.7).

De-worming coverage was 64.1%, less than in the previous two surveys (2017 and 2015, 83.5% and 86.6%, respectively) of children receiving anti-helminths within the past six months.

Of note, almost 1,700 children's records had missing data for vitamin A and de-worming coverage combined.

Household Hunger Scale (HHS)

The Household Hunger Scale (HHS) was included as a baseline indicator starting in 2013 to monitor the prevalence of hunger in the camps. For all camps at HH level, the HHS score has continued to improve in all categories since 2015. Out of 2,937 HH surveyed, most **(96.1%) reported little to no hunger (97.7% in 2017 and 77.0% in 2015); only 3.5% (103 HH) reported moderate hunger (2.2% in 2017 and 21.3% in 2015); and 0.3% (10 HH) reported severe hunger (from 0.1% in 2017 and 1.7% in 2015)** (Graph 2.8).

Food Consumption Score – Nutritional Quality Analysis (FCS-N)

The FCS-N was developed by the WFP to assess the likely adequacy of protein, vitamin A and heme iron (found only in meat and fish), based on the number of

times a HH consumed foods rich in these nutrients. Protein and micronutrient deficiencies (e.g., vitamin A and iron) are risks for stunting and wasting. Micronutrient deficiencies such as vitamin A and iron, over long periods of time, lead to chronic undernutrition. The FCS-N data can be used to prioritize nutrition programme activities, improve understanding of the impact of food assistance or food-based interventions and identify trends.

The FCS-N was added to the Nutrition Survey in 2017. The results show most HH surveyed reported consuming an 'acceptable' diet (98.5%, Graph 2.9-3.0), indicating an adequately diverse diet; however, only ~one in three HH reported consuming heme iron-rich foods daily (35.2%) as compared to protein (88.6%) and vitamin A-rich (89.6%) foods (Graph 3.2). Daily vitamin A and protein consumption were high, almost reaching 90% for each.

RECOMMENDATIONS

Stunting

1. Continue community based IYCF Campaign with behaviour change communication (BCC) and Growth Monitoring & Promotion (GM&P) in all camps, targeting families with children 6-24 months of age, while promoting healthy maternal status as part of the campaigns.

2. Ensure IYCF activities are relevant not only to mothers but to other family members who influence childcare decisions (e.g., grandmothers, fathers and youth).

3. Use social media platforms such as Facebook, YouTube, etc. to deliver key nutrition messages as relevant in each camp.

4. Especially with frequent camp-based staff turnover, continue to train health workers and community facilitators to collaborate and conduct uniform, intensive IYCF promotion activities in all camps using standardized ToT Nutrition Curriculum. Ensure FSN camp-based staff focal point has capacity to lead these activities.

IYCF Practices

Maternal Nutrition

1. Maternal nutrition education sessions are an opportunity to promote the importance of ANC visit as soon as a pregnancy is known. All IYCF-related campaigns should include this message.

2. Health benefits of weight gain for the mother during pregnancy need to be emphasized to improve understanding and support and sustain behaviour change.

3. Protein consumption during pregnancy and breastfeeding need to be promoted as many reported less frequently eating protein-rich foods relative to intake when not pregnant or breastfeeding. This topic should also be discussed during cooking demonstrations to determine barriers to protein consumption during pregnancy and breastfeeding.

Breastfeeding

While **EBF duration improved, continued focus is needed to reach the recommendation for EBF until six months of age**. Continue to encourage and promote a supportive environment, discussing in small group sessions.

Complementary Feeding

Include messaging in IYCF-related sessions to continue to sustain behaviour

change on timing of initiating complementary feeding.

Micronutrient Deficiency – Riboflavin (Vitamin B2)

1. Continue to focus on diet diversity in nutrition key messages to prevent deficiencies. Focus on foods that will provide key nutrients found in three food groups.
2. Utilize FCS vendor shops as an opportunity to promote diet diversity at point of sale, providing three food group education and signage to vendors.

SFP/TFP Enrolment

1. One factor contributing to the low enrolment is the 'very low' rate of wasting for moderately and severely malnourished children (1.9% and 0.2%, respectively). The denominator is small so even one malnourished child not identified contributes to a low enrolment rate. In comparison, the Annual HIS Report for 2019 showed the enrolment rate as 57% for children.

2. Even with the small numbers affecting enrolment, develop new ways to identify wasted children in the community without solely relying on attendance at GM&P to identify wasted children.

Vitamin A/De-worming

1. Continue to follow TBC SFP Guidelines 2018 vitamin A protocol for children, pregnant women and nursing mothers, documenting in standard health card.
2. Continue to provide anti-helminths six-monthly for all children 1-12 years of age, documenting de-worming in standard health card.
3. Health agencies to ensure staff understand importance and standardized location for documenting both vitamin A supplementation and de-worming.

HHS

Continue to include as part of FCS PDM surveys, conducted quarterly.

FCS-N

1. It is possible that the importance of iron-rich meat and fish sources is understood but is cost prohibitive for many HH. Integrate discussions on diet diversity and potential barriers during on-going nutrition activities, particularly targeting young girls prior to pregnancy and pregnant women.
2. Continue encouraging Asia*RE*Mix fortified flour consumption for blanket and target SFP participants, ensuring education about and barriers to including iron-rich foods are programmed into activities.
3. Examine trends in diet diversity and important macro- and micronutrients using TBC's FCS PDM surveys as they are conducted more frequently than the biennial nutrition survey.
4. Adapt current evidence and best practices into on-going and future programme planning and implementation.

BACKGROUND

TBC and CCSDPT Health Agencies conducted nutrition surveys of children 6-59 months of age in all camps in 2019. These **surveys are conducted biennially to estimate the prevalence and examine trends in acute (wasting) and chronic (stunting) malnutrition; micronutrient deficiencies; SFP, de-worming and vitamin A supplementation coverage; feeding practices; and HHS** in the refugee population in nine camps.

Child Growth and Nutrition Indicators

This report presents the prevalence of two key indicators - **weight-for-height (wasting)** and **height-for-age (stunting)** - for malnutrition as recommended by the World Health Organization (WHO), the United Nations High Commissioner for Refugees (UNHCR), and the World Food Programme (WFP).

Wasting is generally indicative of recent and severe weight loss, often associated with acute starvation and/or recent disease. It is considered the best indicator of acute malnutrition and a strong predictor of mortality among children <five years of age.

Stunting is generally indicative of a chronic process resulting from suboptimal nutrition and/or health conditions. Stunting may have long-term effects, negatively impacting cognitive development, school performance and maternal reproduction. Ultimately, stunting may adversely impact the economic growth potential of a country.

This report provides by camp and borderwide prevalence of wasting and stunting in children <five years of age. Surveys were completed from May through November 2019 in all camps.

METHODOLOGY

SAMPLING

Sample Size Calculation (using 95% confidence level and a design effect of one)**:**

$$n = \frac{k \times t^2 \times (1-p) \times p}{\gamma^2}$$

n= sample size
k= design effect- for simple random sample, use 1
t= 1.96 for 95% confidence level
p= estimated prevalence of malnutrition
γ= precision

The minimum sample size of children for each camp was calculated using estimated prevalence and desired precision, with 10% added to account for non-respondents, resulting in a sample size of at least 405 children per camp.

Estimated Prevalence of Malnutrition	Precision	Minimum Sample Size	Minimum Sample +10%
40% chronic	5%	368	405
4% acute	2%	368	405

SAMPLING PROCESS

The TBC Total Population Database (TPD) was used to select HH and children for the surveys in the nine camps.

Steps for random selection of HH with children and individual children:

1. The most recent TPD (monthly camp dataset, usually for two months prior to field work) was used to develop the sample frame for each camp.

2. Required variables for sampling were selected from the TPD and cleaned and recoded in MS Excel. This included coding all individual children within the age range of 6-59 months, based on their age in days from their birth date.
3. A list of all HH heads with children 6-59 months was generated as the sample frame for random selection of HH in each camp.
4. Random selection of HH, from among all HH heads with children 6-59 months, was completed using an MS Excel Addin "Random Sorter for Excel". The required minimum sample for each camp was 405 children, but random sample selection was by HH, so 405 HH with children were selected. Children were therefore over-sampled, to allow for potential data errors or absences. Since BDY and BMS had less than a total of 405 HH with children 6-59 months of age in each camp, a census listing of these HH and their children were used for the nutrition survey in both camps.
5. The above process produced the final list of the random sample of HH heads and their children.
6. Field staff contacted the randomly selected HH to invite them to bring their children for interview and measurement at the central interview stations.

Definitions and Inclusion Criteria

Children 6-59 months of age were included in the survey. Children whose age was unknown were not included.

Definitions for global, moderate, and severe wasting and stunting were based on current WHO criteria (see Definitions and Benchmarks).

WHO Growth Standards were used to report principal anthropometry results.

Angular stomatitis (AS, riboflavin deficiency) was identified by trained medics. Last date of vitamin A supplementation and de-worming were determined using the child's health card.

SFP/TFP enrolment was obtained by first identifying moderate and severely malnourished children by height and weight measurements taken as part of the survey, and then asking the caregiver accompanying the child during the survey if the child was currently enrolled in either SFP or TFP.

HHS and FCS-N were used with variables coded and scored as per reference publications.

Questionnaires & Training

Questionnaires were translated and back-translated into Burmese and Karen, pre-tested, with interviews conducted in the primary HH language. Key topics of the questionnaire were HH information; child health card data; HHS; FCS-N; and feeding practices (maternal nutrition, breastfeeding and complementary feeding). Additionally, a clinical exam was conducted by a trained medic, and weight, height and mid-upper arm circumference (MUAC) were measured (see Appendix 2, 2019 Nutrition Survey Questionnaire.)

Survey Training

Survey teams for each camp were composed of TBC Food Security and Nutrition Officers (FSNO) and Health Agency staff (medics, nurses, community health workers and reproductive and child health workers). Teams were trained by the TBC Food Security and Nutrition Specialist (FSNS) and FSNO prior to the survey, which included a trial run of the survey process. Survey teams were supervised during the surveys by the TBC FSNS and/or FSNO, and by senior camp-

based health agency staff.

Survey Procedures

HH were invited to participate according to a schedule developed by survey staff. Selected HH were surveyed even if the target number of children had already been reached. HH were requested to bring the child's health card, ration book and outpatient card to the survey.

Every child between 6-59 months in each selected HH was surveyed. If a child was found not to be between 6-59 months of age, they were not surveyed.

If a HH failed to come to the survey, runners followed up three times. If after three visits the HH was not available, they were no longer included in the survey and were not replaced.

Data Analysis

Data was coded and entered into MS Excel, then imported into SPSS version 19. Data entry and analyses were conducted by the Institute of Nutrition, Mahidol University.

Quality control included random checks of data, preliminary analysis to identify flags and mistakes, and review of all coded data entered. Plausibility checks were run on all data to identify errors in data collection and entry, and that measurements were not skewed.

Exclusions included: age out of range or unknown; and anthropometric outliers [z-scores from zero (reference mean) WHO flags: WHZ -5 to 5; HAZ -6 to 6].

RESULTS

AGE AND SEX DISTRIBUTION

3,780 children were surveyed in all nine camps (Table 1.0).

Table 1.0 Age and sex sample distribution

	Boys		Girls		Total		Ratio
AGE (mo)	**No.**	**%**	**No.**	**%**	**No.**	**%**	**Boy : Girl**
6-11	186	49.3	191	50.7	377	9.9	1.0
12-23	379	48.7	400	51.3	779	20.6	0.9
24-35	457	51.5	431	48.5	888	23.5	1.1
36-47	460	51.9	427	48.1	887	23.5	1.1
48-59	439	51.7	410	48.3	849	22.5	1.1
Total	**1,921**	**50.8**	**1,859**	**49.2**	**3,780**	**100.0**	**1.0**

- Survey respondents **consisted primarily of mothers (85.2%)**, with a small number of fathers (8.4%) and grandparents (3.1%). The range of education of the mothers was large, 0 -17 yrs, with 21.7% reporting they had not attended school. **89.5% had ≤10 yrs of education.** By camp, the range of mothers who had not attended school was **14.9% (TH) up to 29.3% (MLO).**
- Most (80.1%) identified their ethnicity as Karen; 11.3% Karenni; and 6.2% Burmese Muslim. The remainder of participants included Arakan, Burman, Chin, Kachin, Mon and Shan.

MALNUTRITION RATES

ACUTE (WASTING) MALNUTRITION

2.2% of children borderwide were found with global acute malnutrition (GAM) (Table 1.1)

- 7 children (0.2%) were severely wasted (z score<-3).
- Slightly more boys (2.6%, n=49) than girls (1.8%, n=33) were malnourished, but the difference was not significant (p>0.5).

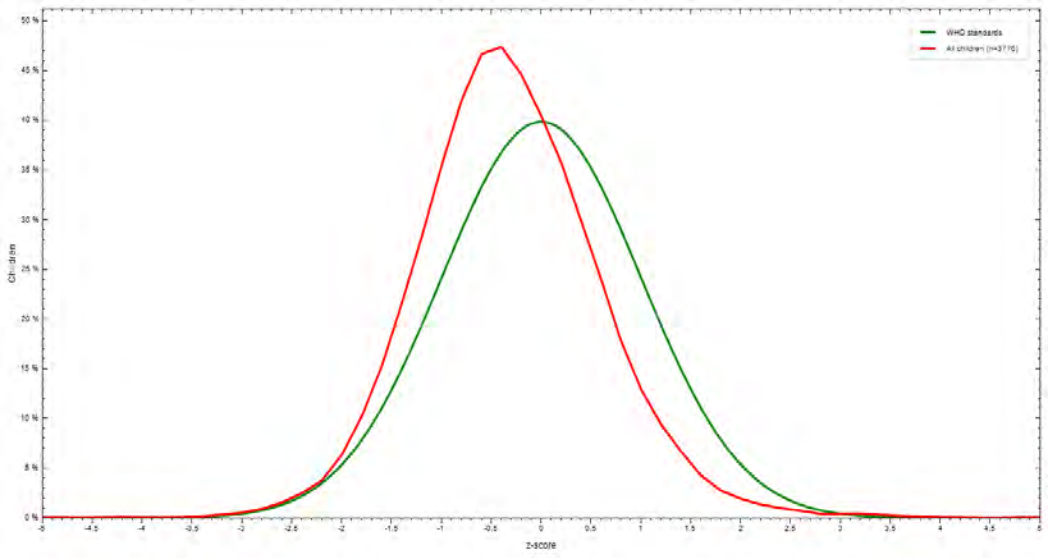
Table 1.1 Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 3,780	**Boys** n = 1,921	**Girls** n = 1,859
Global malnutrition (<-2 z-score)	**2.2 %** (82) (1.8 – 2.7 95% CI)	**2.6 %** (49) (1.9 – 3.4 95% CI)	**1.8 %** (33) (1.3 – 2.5 95% CI)
Moderate malnutrition (<-2 z-score and ≥-3 z-score)	2.0 % (75) (1.6- 2.5 95% CI)	2.3 % (45) (1.8 - 3.1 95% CI)	1.86% (30) (1.1 - 2.3 95% CI)
Severe malnutrition (<-3 z-score)	0.2 % (7) (0.1 - 0.4 95% CI)	0.2 % (4) (0.8 – 0.5 95% CI)	0.2 % (3) (0.05 - 0.5 95% CI)

Mean z-score for weight-for-height

The mean z-score for weight-for-height (red curve below) was only slightly shifted left (-0.30 ± 0.90) compared to WHO standard normal distribution (green curve below), indicating population within normal limits for wasting malnutrition (Graph 1.0).

Graph 1.0 Weight-for-Height z-scores

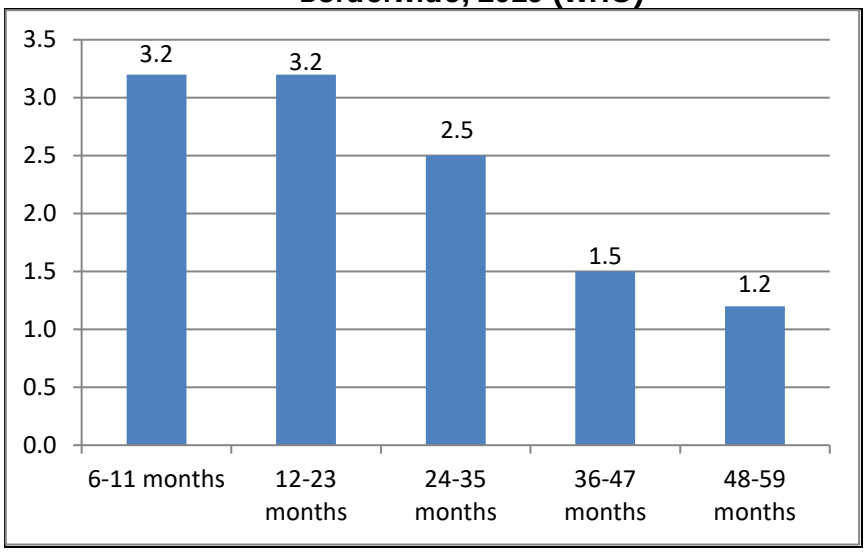


GAM prevalence was highest among children 6-23 months of age (Graph 1.1). Most children with GAM were moderately wasted (Table 1.2).

Table 1.2: Prevalence of acute malnutrition by age (weight-for-height z-score)

		Global wasting (<-2)		Severe wasting (<-3)		Moderate wasting (>= -3 & <-2)		Normal (> = -2)	
Age (mos)	**Total no.**	**No**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	**377**	**12**	**3.2**	2	0.5	10	2.7	365	96.8
12-23	**779**	**25**	**3.2**	2	0.3	23	3.0	754	96.8
24-35	888	22	2.5	2	0.2	20	2.3	866	97.5
36-47	887	13	1.5	0	0	13	1.5	874	98.5
48-59	849	10	1.2	1	0.1	9	1.1	839	98.8
Total	3,780	82	2.2	7	0.2	75	2.0	3,698	97.8

Graph 1.1 Prevalence (%) of GAM by Age in Children 6-59 Months of Age Borderwide, 2019 (WHO)



The prevalence of acute (wasting) malnturition rates by camp is presented in Appendix 1, Table 2, and ranged from 1.4%-2.9%, considered 'very low' to 'low' according to the WHO (see Definitions and Benchmarks).

CHRONIC (STUNTING) MALNUTRITION

An average of 25.8% of children border-wide were found with global chronic malnutrition (Table 1.3)

- Of the boys surveyed, 25.7% were stunted compared to 26.0% of girls. 186 children (4.9%) were severely stunted (z score<-3), with more boys (5.2%, n=99) than girls (4.7%, 87) severely stunted. However, neither of these differences by gender were significant ($p>0.05$).

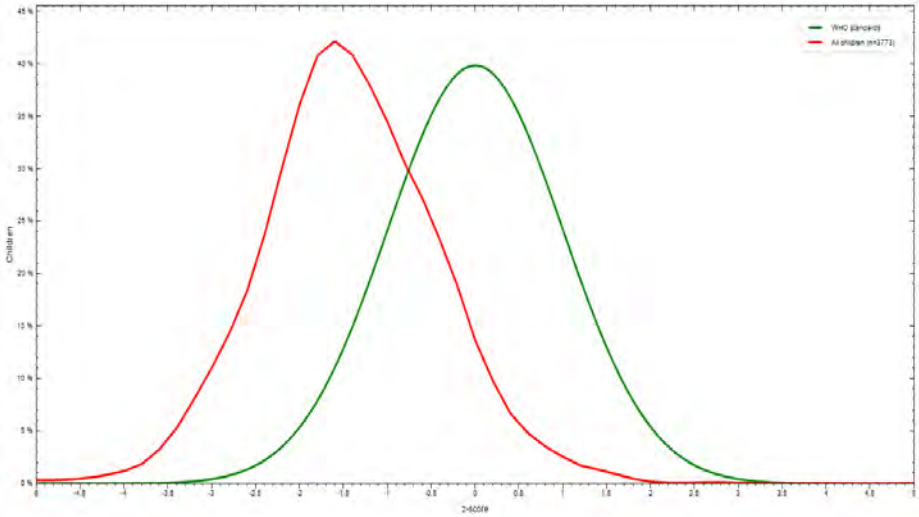
Table 1.3 Prevalence of stunting malnutrition (height-for-age z-score) by sex

CHRONIC – STUNTING – MALNUTRITION	All n = 3,780	Boys n = 1,921	Girls n = 1,859
Prevalence of stunting (<-2 z-score)	**25.8%** (976) (24.5-27.2 95% C.I.)	**25.7 %** (493) (23.8-27.7 95% C.I.)	**26.0 %** (483) (24.0-28.0 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	20.9 % (790) (19.6-22.2 95% C.I.)	20.5 % (394) (18.8-22.4 95% C.I.)	21.3 % (396) (19.5-23.2 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	4.9 % (186) (4.3-5.7 95% C.I.)	5.2 % (99) (4.3-6.2 95% C.I.)	4.7 % (87) (3.8-5.7 95% C.I.)

Mean z-score for height-for-age

The mean z-score for height-for-age (red curve below) was notably shifted to the left (mean z-score = -1.40 ± 1.1) as compared to WHO standard normal distribution (green curve below), indicating that stunting is a nutrition challenge in the population (Graph 1.2).

Graph 1.2 Height-for-Age Z-Scores

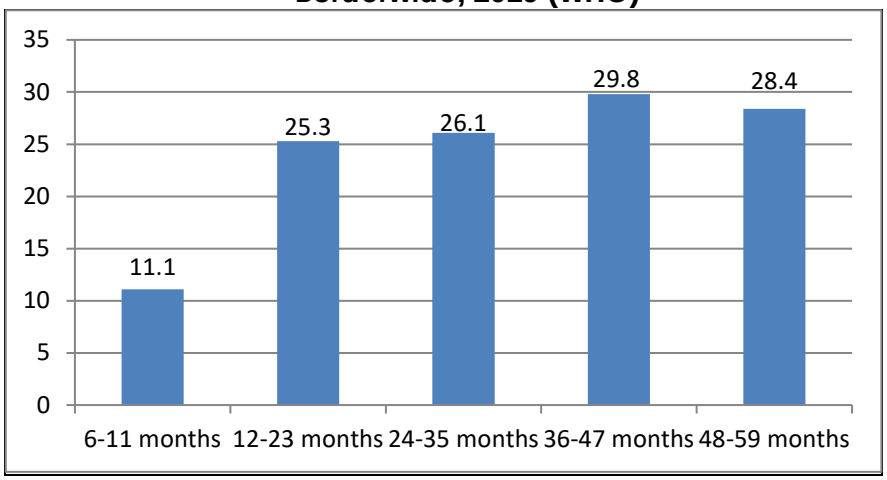


The prevalence of Global Chronic Malnutrition (moderate and severe stunting) was highest in children 36-47 months of age (Table 1.4, Graph 1.3).

Table 1.4 Prevalence of stunting by age (height-for-age z-score)

		Global stunting <-2 z score)		Severe stunting (<-3 z-score)		Moderate stunting (≥-3 & <-2 z-score)		Normal (≥-2 z-score)	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	377	42	11.1	5	1.3	37	9.8	335	88.9
12-23	779	197	25.3	48	6.2	149	19.1	582	74.7
24-35	888	232	26.1	45	5.1	187	21.1	656	73.9
36-47	887	264	**29.8**	44	5.0	220	24.8	623	70.2
48-59	849	241	28.4	44	5.2	197	23.2	608	71.6
Total	**3,780**	**976**	**25.8**	**186**	**4.9**	**790**	**20.9**	**2,804**	**74.2**

Graph 1.3 Prevalence Chronic Malnutrition by Age in Children 6-59 Months of Age, Borderwide, 2019 (WHO)



The prevalence of chronic (stunting) malnturition rates by camp (Table 1.5) ranged from 13.6%-36.3%, considered 'medium' to 'high' according to WHO (2018, see Definitions and Benchmarks). Every camp showed a decrease in stunting.

Highest stunting rates continue to be in MRML and MLO (Table 1.5), although continued progress is noted in each successive survey.

Table 1.5 Global Chronic (Stunting) Malnutrition Prevelance by Camp

	2011	2013	2015	2017	2019
	%				
BMN	25.8	24.8	22.3	18.8	13.6
BMS	48.8	35.6	32.9	30.1	20.6
MLO	53.6	49.7	40.5	41.7	36.3
MRML	48.8	49.2	38.4	38.3	33.6
MLA	32.8	37.8	30.0	25.0	21.4
UMP	35.7	42.6	36.6	26.0	19.2
NP	43.2	37.6	39.9	34.5	28.7
TH	40.1	42.6	34.3	34.9	25.5
BDY	44.3	44.6	41.1	33.9	25.5
Borderwide	**41.5**	**40.8**	**35.1**	**31.8**	**25.8**

While stunting reduced since 2017, it has not yet reached 'low' (<10%, WHO criteria, 2018). Further analyses were undertaken to consider other factors.

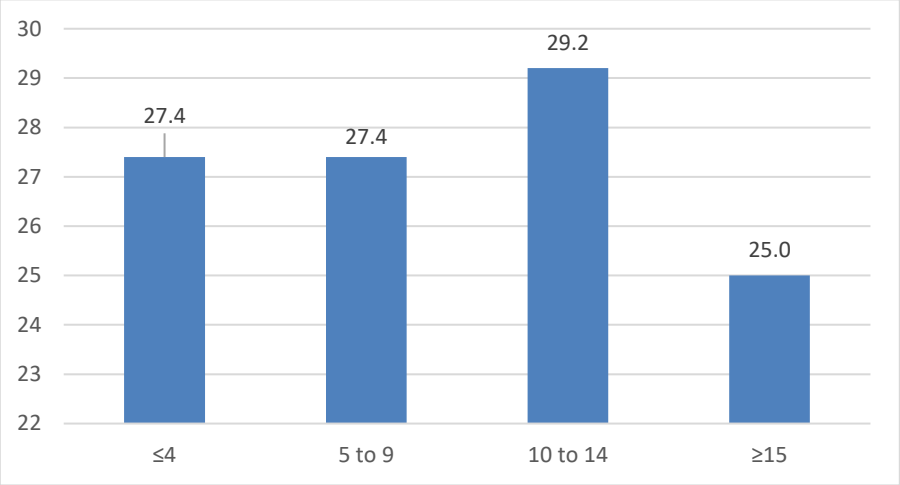
- Table 1.6 shows the distribution of the sample survey of HH by Community Managed Targeting (CMT)[1] Ration Category – the majority were considered Standard Ration (83.7%). The rate of stunting increased linearly with vulnerability, with the Most Vulnerable having the highest rate of stunting at 35.8% (p=0.002).
- HH with 10-14 family members had the highest rate of stunting compared to other HH sizes (p<0.001; Graph 1.4).

[1] Community Managed Targeting (CMT) is a system by which the refugee communities decide on the Food Assistance level provided in camps based on several factors including HH resources, vulnerability, needs, etc.

Table 1.6 HH CMT Ration Category

CMT Ration Category of HH	Percent in Survey Sample (N, %)	Global Chronic Malnutrition (Stunting)
Most Vulnerable	99, 3.4%	35.8%
Vulnerable	346, 11.8%	30.0%
Standard	2,459, 83.7%	25.1%
Self-Reliant	27, 0.9%	12.1%

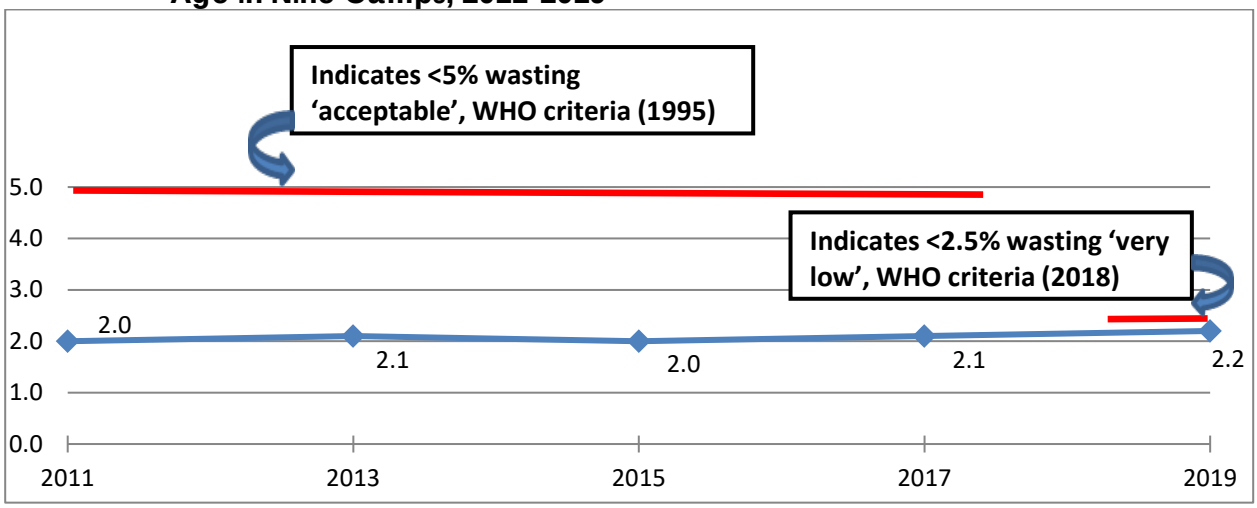
Graph 1.4 Stunting Prevalence (Global Chronic Malnutrition) by Family Size



Trends in Rates of Acute & Chronic Malnutrition

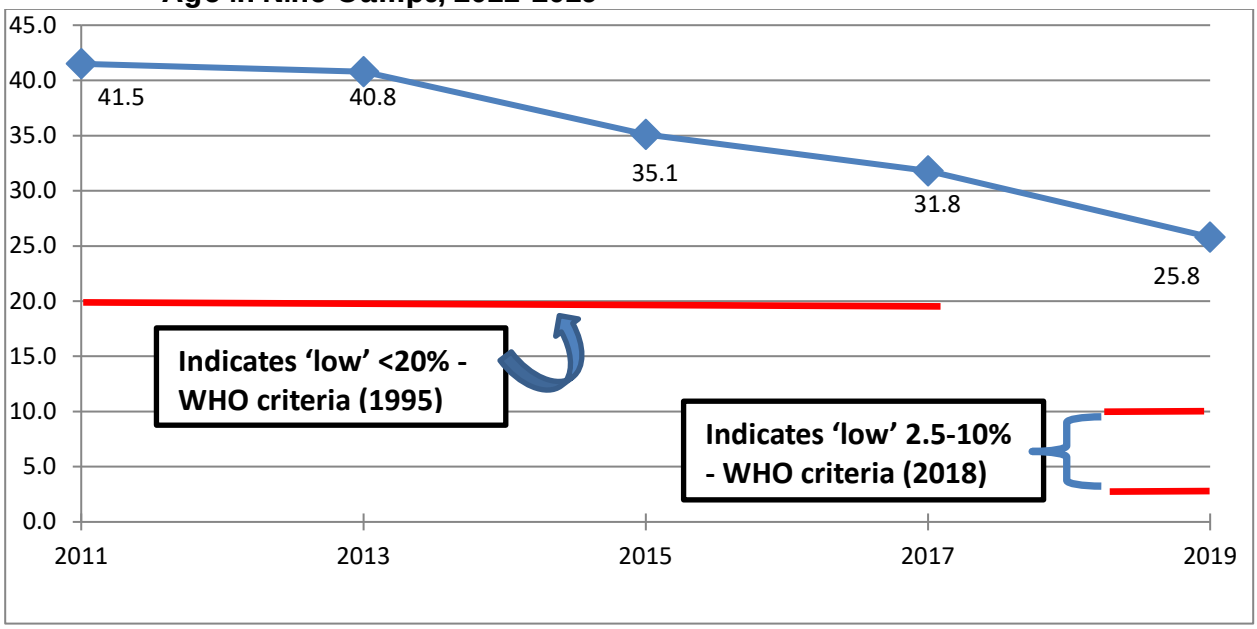
The borderwide rate of acute malnutrition continues to be below the WHO benchmark considered 'very low'.

Graph 1.5 Prevalence of Acute – WASTING – Malnutrition in Children 6-59 Months of Age in Nine Camps, 2011-2019



There is a clear downward trend in chronic malnutrition rates since 2013 (Graph 1.6), although the current level under updated WHO criteria (2018) is considered high (WHO criteria of 20% - <30%).

Graph 1.6 Prevalence of Chronic – STUNTING – Malnutrition in Children 6-59 Months of Age in Nine Camps, 2011-2019

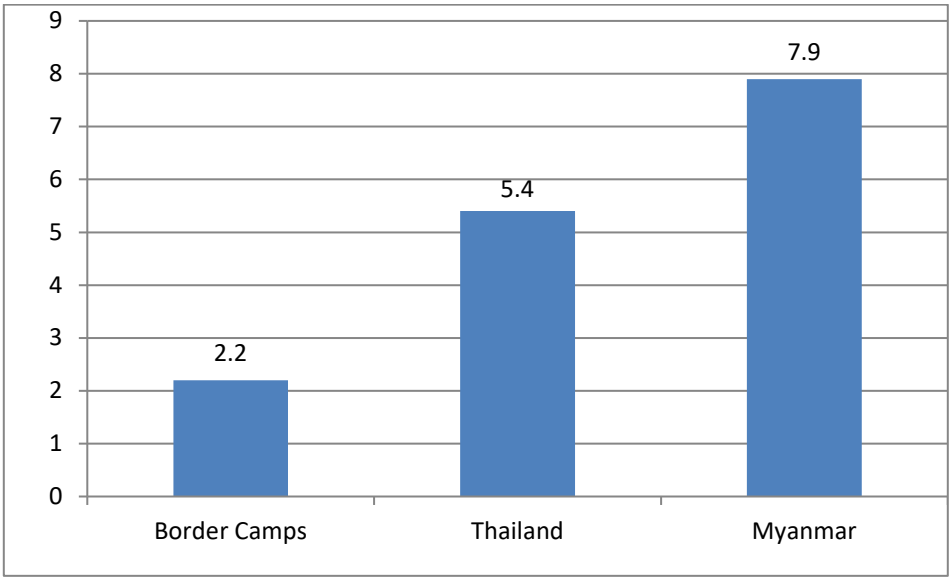


Note – With 1995 WHO criteria, stunting would be classified as 'medium (20-29.9%). With updated criteria from 2018, the category is now classified as 'high'.

Regional Acute & Chronic Malnutrition Rate Comparisons

Acute malnutrition rates in camps remain considerably lower than in Thailand or Myanmar (Graph 1.7, Thailand and Myanmar data from Multiple Indicator Cluster Survey (MICS), 2015-2016 and Myanmar DHS 2015-2016, respectively).

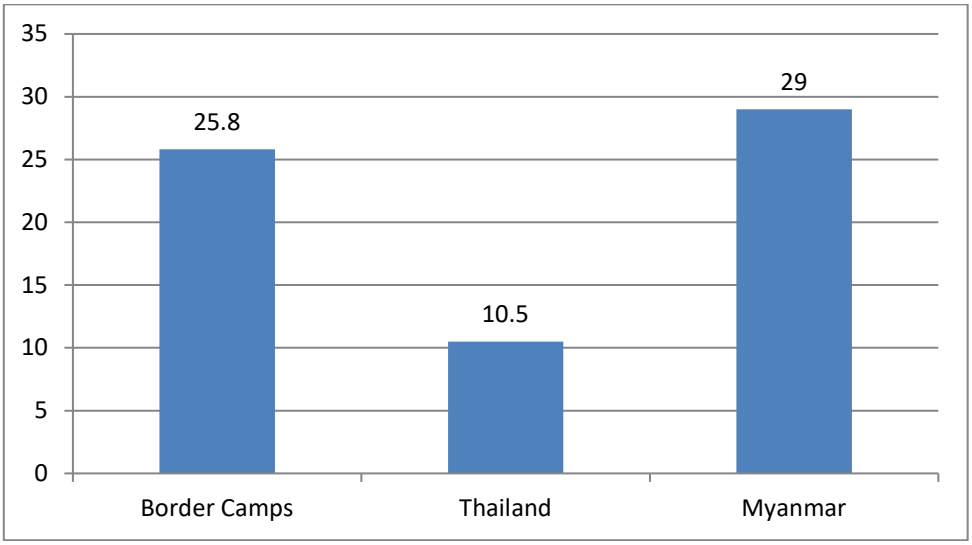
Graph 1.7 Comparison of Acute – WASTING – Malnutrition (%) in Children 6-59 Months in Nine Camps, Thailand & Myanmar, 2019 (WHO)



Chronic malnutrition rates in camps are significantly higher than Thailand but lower than Myanmar. (Graph 1.8, Thailand and Myanmar data from 2015-2016 MICS and Myanmar

2015-2016 DHS, respectively). Of note, stunting prevalence ranged from 20.0% in Yangon Region to 41.0% in Chin State.

Graph 1.8 Comparison of Chronic – STUNTING – Malnutrition (%) in Children 6-59 Months in Nine Camps, Thailand & Myanmar, 2019 (WHO)



IYCF PRACTICES

MATERNAL NUTRITION

ANTENATAL ATTENDANCE

- For their most recent pregnancy, most women (93.1%) reported attendance at ANC as soon as they knew of their pregnancy (**TH was notably lower at 74.7%**). The majority **(74.9%;** n=2,199) went to ANC between the **first one to three months of their pregnancy**. **BDY** had the **highest rate** of mothers attending ANC as soon as they knew of their pregnancy **(99.5%).** MRML **had >40%** of mothers who **did not attend ANC until four months or later during their pregnancy** (Table 1.7, n=2,937).

Table 1.7. First ANC Visit Timing

Camps	As Soon As Knew of Pregnancy (%, n)	≥4 Months during Pregnancy (%, n)
BMN	95.7 (358)	13.8 (51)
BMS	82.5 (146)	23.5 (39)
MRML	97.0 (354)	**43.1(155)**
MLO	97.7 (376)	13.1 (481)
MLA	97.9 (333)	30.0 (95)
UMP	98.6 (352)	12.0 (41)
NP	94.1 (321)	24.9 (84)
BDY	99.5 (186)	17.2 (32)
TH	**74.7 (307)**	28.5 (116
All Camps:	**93.1 (2,733)**	**23.1% (661)**

KNOWLEDGE OF BENEFITS OF WEIGHT GAIN DURING PREGNANCY

- The respondents' knowledge of the benefits of weight gain during pregnancy is presented in Appendix 1, Table 2 Borderwide, the benefits of weight gain during pregnancy seem to be not well understood, much as in the 2017 survey.

- By camps, the knowledge of benefits of weight gain during pregnancy was quite variable; however, the results can be **used by camp to prioritize areas** to focus on to improve knowledge (Appendix 1, Table 2). For example, in all camps except for BDY, most **mothers understood that benefits of weight gain during pregnancy included preventing risks of maternal complication and death. Preventing anemia during pregnancy was least well understood in all camps (1.2%-40.6%)**.

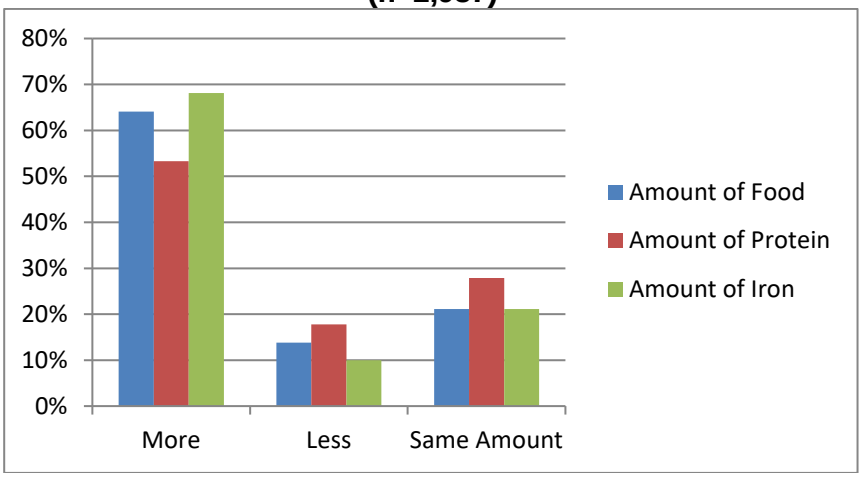
FOOD RESTRICTION AFTER DELIVERY

- Most (**55.2%,** n=2,937) responded that after delivery of their last child, they **restricted the kinds of food** consumed. Restrictions most often included: **dogfruit (19.4%, n=712), cha-om or climbing wattle (19.2%, n=703), chili (16.0%, n=586), and fermented foods (12.5%, n=462).** These are the same foods reported as restricted after delivery during the 2017 survey.

FOOD CONSUMPTION DURING PREGNANCY

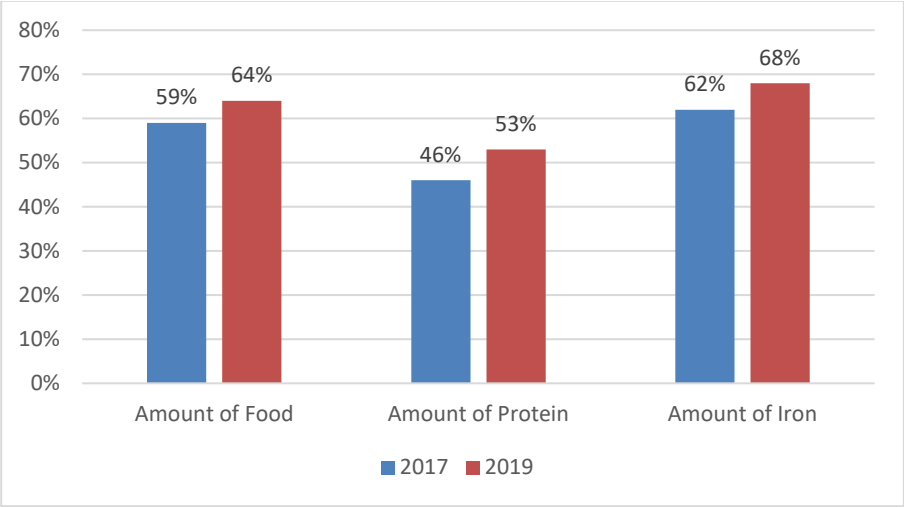
- Women were asked about how they ate during their most recent pregnancy, compared to when they were not pregnant (Graph 1.9). **Borderwide**, **best practices were for iron** consumption – more participants reported consuming more iron and fewer reported consuming less iron. Practices for protein intake during pregnancy showed the **highest frequency taking in less protein** compared to iron and overall amount of food. The same patterns were found by camps (Appendix 1, Table 3).

Graph 1.9. Borderwide: Food Consumption during Pregnancy (n=2,937)



- Overall, there were improvements in each reported category of consumption during pregnancy since the 2017 survey (Graph 2.0).

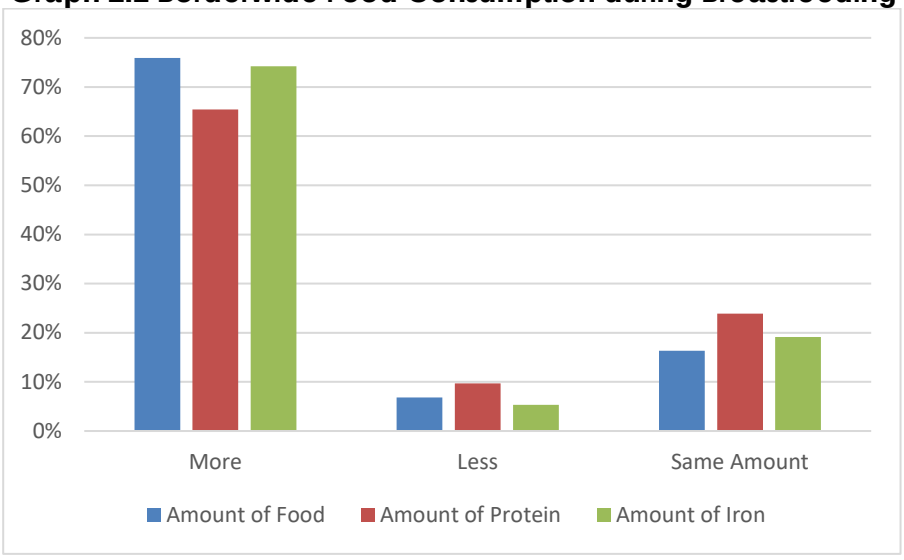
Graph 2.0. Borderwide: Consumption More during Pregnancy



FOOD CONSUMPTION DURING BREASTFEEDING

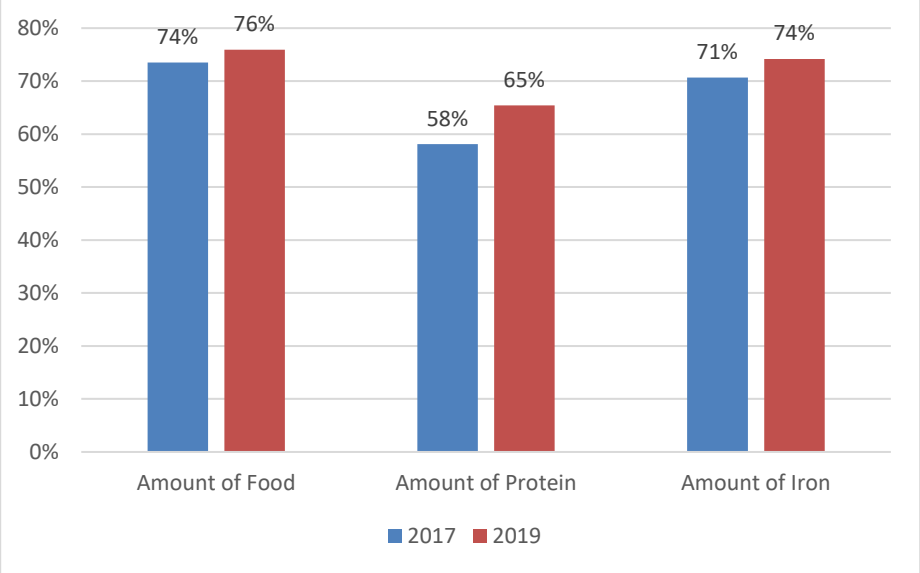
- Women were also asked how they ate during the last time they were breastfeeding compared to when they were not breastfeeding (Graph 2.1 & Appendix 1, Table 4). **Practices were best related to the overall amount of food and iron** consumed. Although protein consumption during breastfeeding was lower, it was better than consumption reported during pregnancy.

Graph 2.1 Borderwide Food Consumption during Breastfeeding



- Similar to the results for consumption during pregnancy, there were improvements in each reported category of consumption during breastfeeding since the 2017 survey (Graph 2.2).

Graph 2.2. Borderwide: Consumption More during Breastfeeding



SUPPLEMENTATION DURING PREGNANCY OR BREASTFEEDING

- Most women stated during pregnancy or breastfeeding they took **iron, vitamin A and folic acid (Table 1.8).** Additionally, 91.0% (n=2,673) reported taking vitamin B1; 45.9% (n=1,347) multivitamin; and 40.6% (n=1,192) vitamin C. This is similar to that reported in 2017 with vitamin A slightly lower in this survey (91.9% in 2017).

Table 1.8 Supplementation during Pregnancy or Breastfeeding

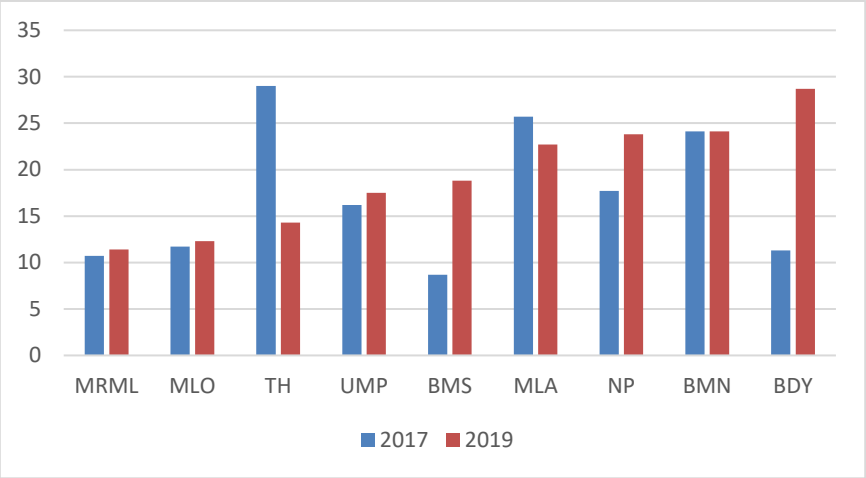
n=2,937	Iron	Vitamin A	Folic Acid
Yes	97.5%	87.9%	97.6%

BREASTFEEDING

Breastfeeding Initiation & Practices

- Borderwide, most women **(82.0%) had put their newborn to their breast immediately or within one hour after birth**, as recommended (**range 72.6% in ML to 91.4% in BDY**). Interestingly, in 2017 BDY had the lowest rate of women following this recommended practice at only 52.1%.
- Similar to 2017, **2.3% reported never breastfeeding** (1.9% in 2017).
- Borderwide, 19.0% of mothers of children 6-24 months of age indicated that they were not currently breastfeeding, despite recommendations to do so (17.3% in 2019). ML, NP, BMN and BDY had the most women who were not currently breastfeeding while TH improved and had more mothers of children 6-24 months following the recommended breastfeeding practice (Graph 2.3).

Graph 2.3 Not Currently Breastfeeding by Camp (% 6-24 mos), 2017-2019



- Borderwide**, duration of breastfeeding** (6-24 months of age) was **20.9 months ± 0.2 months** (n=2,873), much improved since 2017. All camps had similar durations of breastfeeding with **TH the highest (20.9%) and BDY having the largest improvement** (Table 1.9).

Table 1.9 Duration (months) of Breastfeeding (mean ± SD)

Camp	2019	2017
BMN	19.9 ± 0.4	13.9 ± 4.7
BMS	21.4 ± 0.7	12.4 ± 6.0
MRML	23.2 ± 0.6	14.1 ± 6.8
MLO	22.1 ± 0.5	15.5 ± 7.6
MLA	20.4 ± 0.5	13.7 ± 5.6
UMP	20.2 ± 0.5	13.6 ± 5.5
NP	19.3 ± 0.5	13.8 ± 5.0
BDY	**20.4 ± 0.7**	**4.9 ± 8.1**
TH	**20.9 ± 0.6**	9.9 ± 7.4
All Camps:	**20.9 ± 0.2**	**13.0 ± 6.2**

- Borderwide, the mean **duration for EBF** was **4.7 months** (n=2,861). **EBF duration was increased for every camp except MRML since 2017 survey. The lowest duration (below borderwide mean) continued to be** in **TH**, **MLO, MLA and MRML** (Table 2.0).

Table 2.0 Duration of EBF 2017-2019

Camp	Months (mean ± SD)	
	2017	2019
BMN	5.1 ± 1.4	5.5 ± 0.1
BMS	4.7 ± 1.6	5.2 ± 0.1
MRML	4.7 ± 1.9	**4.2 ± 0.1**
MLO	**3.3 ± 2.4**	**4.0 ± 0.1**
MLA	**3.5 ± 2.5**	**4.1 ± 0.1**
UMP	5.2 ± 1.7	5.6 ± 0.1
NP	5.1 ± 1.9	5.2 ± 0.1
BDY	5.1 ± 1.8	5.8 ± 0.1
TH	**3.2 ± 2.0**	**3.9 ± 0.1**
All	**4.3 ± 2.1**	**4.7 ± 0**

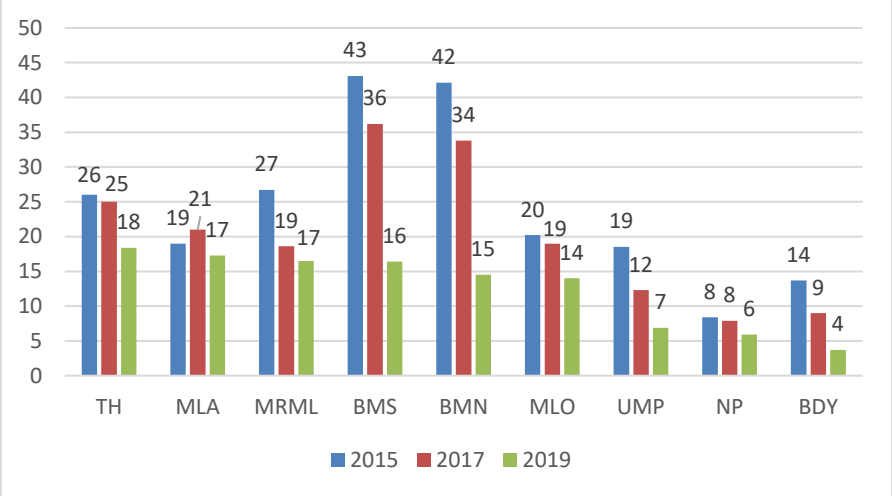
BENEFITS OF EBF

As in both 2015 and 2017 surveys, **most agreed that benefits of EBF were those directly related to the child's health** (sufficient nutrients for baby; protects baby from infections and promotes optimum growth and development). **Benefits related to the mother's health were less frequently cited** (reduce risk of post-partum bleeding, decreases breast, ovarian and cervical cancers, delays new pregnancy and weight loss for mother), likely due to poor understanding of these benefits. By camp, results can help to inform programming of education and campaigns, targeting areas that need strengthening (Appendix 1, Table 7).

COMPLEMENTARY FEEDING

- Border-wide, 13.1% of mothers reported giving the first meal to their child before six months of age, improved 7.0% since 2017 and further, almost 11.0% since 2015. Mothers in BDY, UM and TH were all below 10.0% of mothers initiating early complementary feeding; however, all camps showed improvement since the 2017 survey)and sustained improvements since the 2015 survey, after which the 'Healthy Babies, Bright Futures' or IYCF programme was implemented in 2014 to address chronic malnutrition (Graph 2.4).

Graph 2.4 First Meal Given Before Six Months by Camp (%), 2015-2019



- 'Benefits of Asia*RE*Mix (provided for children enrolled in SFP) - Borderwide, the least well understood benefit of Asia*RE*Mix was protecting babies from infections (Table 2.1).

Table 2.1 Benefits of Asia*RE*Mix

	% Agree
Promotes optimum growth & development	81.8
Sufficient nutrients for baby	77.8
Protects baby from infections	42.2

MICRONUTRIENT DEFICIENCIES

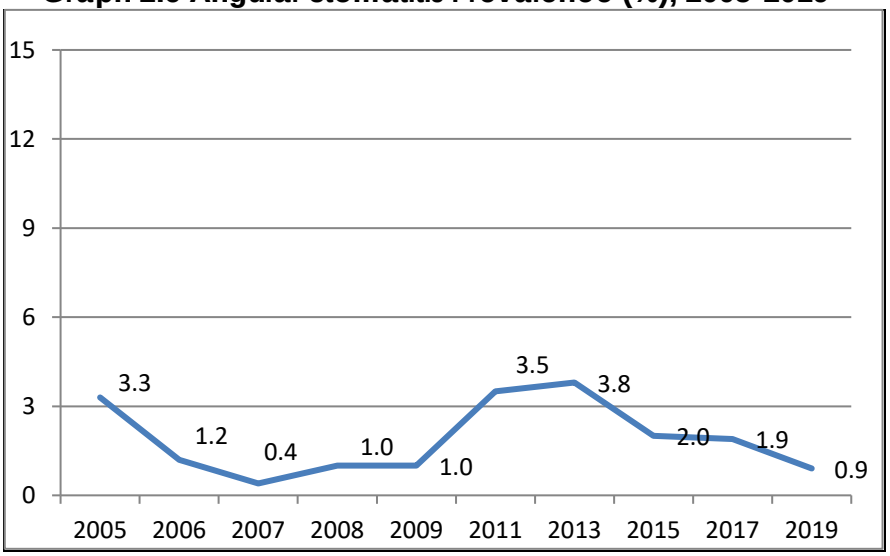
Of children surveyed, 0.9% (n=34) were found with bi-lateral angular stomatitis (AS), a symptom of ariboflavinosis (vitamin B_2 deficiency (Table 2.2). AS also indicates general

vitamin B deficiencies in a population. As shown in Graph 2.6, AS continues to decline since 2013 when it was at the highest rate reported for all previous nutrition surveys.

Table 2.2 Angular Stomatitis Prevalence

Camp	Children with AS (n)	Children with AS (%)	Total Screened
BMN	0		426
BMS	0		233
MRML	3	0.6	535
MLO	3	0.5	560
MLA	12	2.7	444
UMP	0		428
NP	5	1.2	425
BDY	4	1.7	239
TH	7	1.4	490
All Camps	**34**	**0.9**	**3,780**

Graph 2.6 Angular Stomatitis Prevalence (%), 2005-2019



SUPPLEMENTARY/THERAPEUTIC FEEDING PROGRAMME ENROLMENT

SFP and TFP enrolment in a camp setting should be at least 90% (e.g., at least 90% of wasted children (<-2 weight-for-height z-score) are enrolled in feeding programmes; Sphere, 2011).

- Of the 75 children identified as moderately acutely malnourished, 20 (26.7%) were already enrolled in SFP (Table 2.3). Of the seven children identified as severely acutely malnourished, two (28.6%) were enrolled in either SFP or TFP (Table 2.4). The highest reported rate of SFP/TFP enrolment was 42.4% in 2011.
- Population movement is continuing and has probably increased, which has likely contributed to low enrolment rates.

Table 2.3 SFP Enrolment – Moderate Wasting

Camp	No. wasted children	No. of wasted children enrolled in SFP	% Enrolled
BMN	9	1	11.1
BMS	5	2	40.0
MLO	16	7	43.8
MRML	13	3	23.1
MLA	8	0	0
UMP	7	2	28.6
NP	6	2	33.3
BDY	4	2	50.0
TH	7	1	14.3
All Camps	**75**	**20**	**26.7%**

Table 2.4: SFP/TFP ENrolment – Severe Wasting

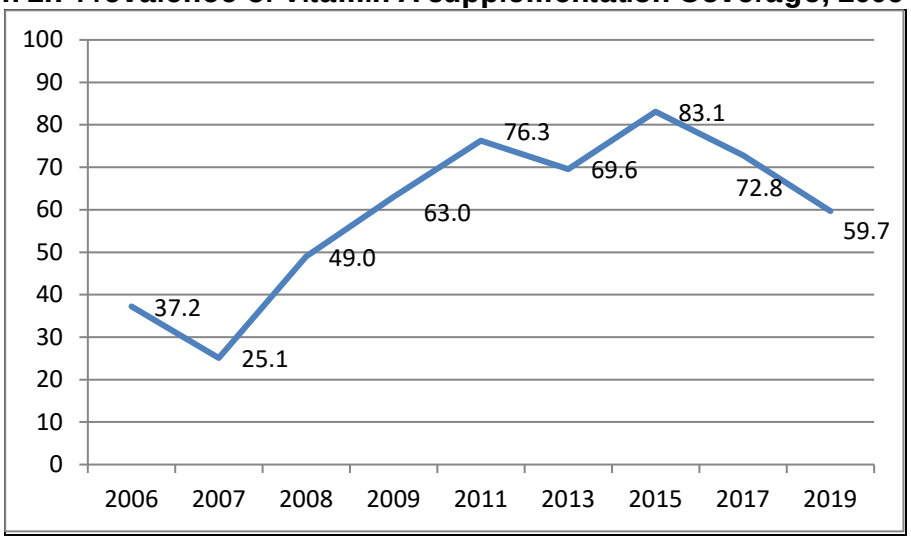
Camp	Wasted children (n)	Wasted children enrolled in TFP (n)	Wasted children enrolled in SFP (n)	% Enrolled
BMN	1	0	0	0
BMS	1	0	1	100.0
MLO	0	0	0	NA
MRML	2	0	0	0
MLA	1	0	0	0
UMP	1	0	1	100.0
NP	0	0	0	NA
BDY	0	0	0	NA
TH	1	0	0	0
All Camps	**7**	**0**	**2**	**28.6%**

VITAMIN A SUPPLEMENTATION COVERAGE

At least 95% of children <five years of age should receive high-dose vitamin A supplement at four to six-month intervals to prevent illness and blindness associated with vitamin A deficiency (Sphere 2011).

- The child health card indicated that 59.7% had received vitamin A supplements within the last six months, much less than in recent surveys (Graph 2.7). As population mobility continues to increase, this could result in less accurate documentation in health records.

Graph 2.7 Prevalence of Vitamin A Supplementation Coverage, 2006-2019



DE-WORMING COVERAGE

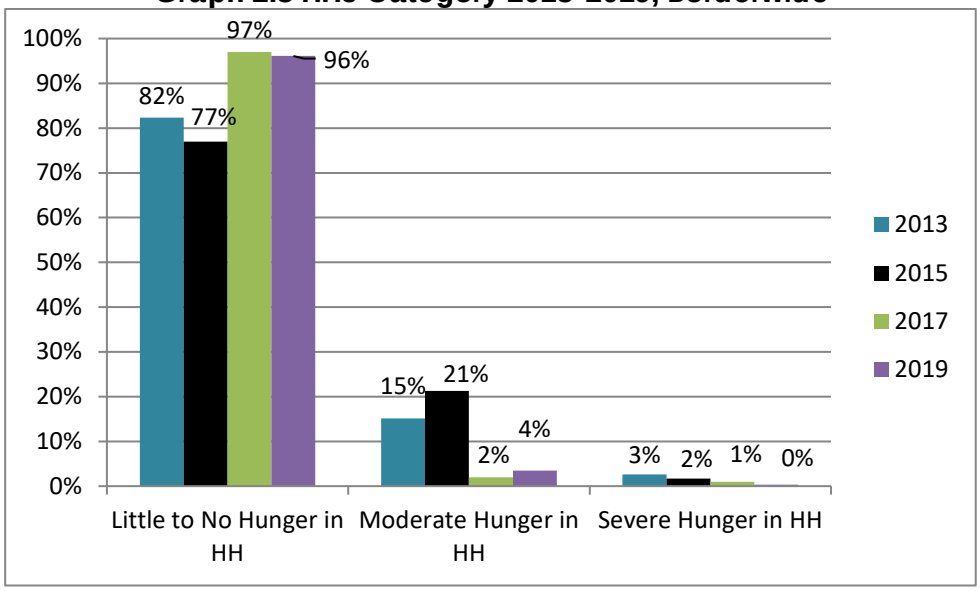
Children <five years of age should receive anti-helminths treatment at six-month intervals to prevent illness and malnutrition associated with helminths infection, including anemia and vitamin A deficiency. Data taken from the child's health card indicate that 64.1% had received anti-helminths treatment within the last six months. De-worming coverage declined compared to previous surveys (2017, 83.5%; 2015, 86.6%). Over 1,300 surveyed children's health cards had missing data for de-worming.

HOUSEHOLD HUNGER SCALE (HHS)

The FANTA-2 (Food and Nutrition Technical Assistance) HHS is comprised of three questions with frequency reported for each, which results in a score between 0-6, with six indicating more HH hunger. The HHS score can be further collapsed into three categories: little to no hunger in the HH; moderate hunger in the HH; and severe hunger in the HH (Graph 2.8).

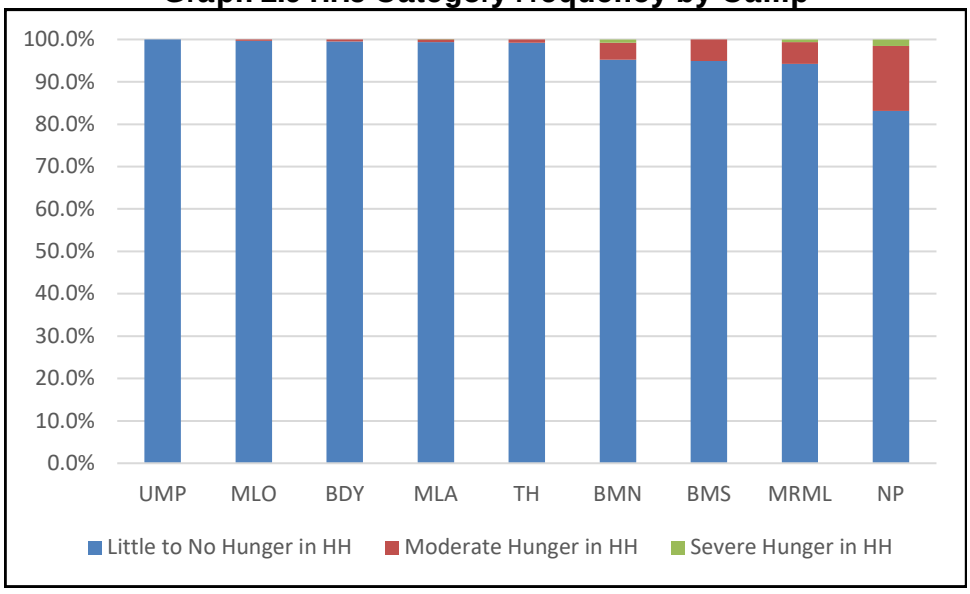
- For all camps (n=2,906 HH) at a HH level, 96.1% reported little to no hunger (n=2,793 HH) little changed from 2017 survey results of 97.7%; 3.5% (n=103) reported moderate hunger; and 0.3% (n=10 HH) reported severe hunger. When data was analyzed for HHS by CMT category, family size and ethnicity, no significant differences were found ($p>0.05$)

Graph 2.8 HHS Category 2013-2019, Borderwide



- NP had the highest rate of moderate hunger (15.6%; n=53 HH) and was one of three camps with cases of severe hunger (5 NP; 3 BMN; and 2 MRML; Graph 2.9).

Graph 2.9 HHS Category Frequency by Camp



Food Consumption Score – Nutritional Quality Analysis (FCS-N)

The FCS-N was developed by the WFP to assess the likely adequacy of protein, vitamin A and heme iron (found only in meat and fish and absorbed well in body), based on the number of times a HH consumed foods rich in these nutrients. Protein and micronutrient deficiencies (e.g., vitamin A and iron) are risks for stunting and wasting.

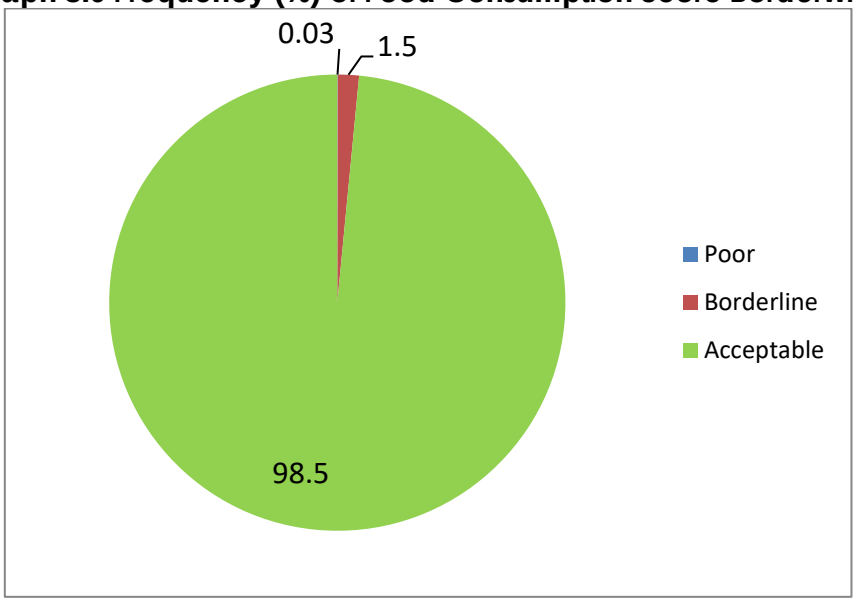
The FCS-N links HH food access and consumption with outcomes such as stunting, wasting and micronutrient deficiencies. Insufficient protein is a risk for wasting and stunting and affects micronutrient intake, as protein foods are also rich in vitamins and minerals.

Micronutrient deficiencies such as vitamin A and iron, over long periods of time, lead to chronic undernutrition. The FCS-N data can be used to enhance nutrition programme design, improve understanding of the impact of food assistance or food-based interventions and identify trends.

In addition, the frequency-weighted diet diversity score is calculated using the frequency of consumption of different food groups consumed by a HH during the seven days prior to the survey. Recommended thresholds for categorizing food consumption are poor, borderline and acceptable.

- Most (98.5%) reported consuming an acceptable diet in the seven days prior to the survey, with only 1.5% reporting borderline (n=43 HH) and poor (n=1 HH) diets (Graph 3.0). This is similar to 2017 survey results: 98.1% acceptable and 1.9% borderline and poor.

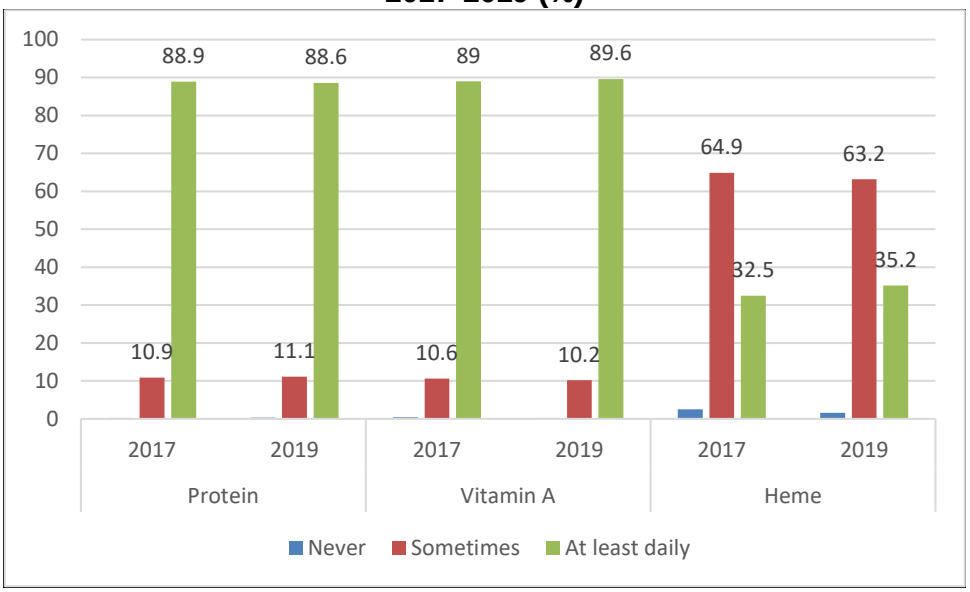
Graph 3.0 Frequency (%) of Food Consumption Score Borderwide



- As there were so few cases of poor diets, poor and borderline categories were combined (n=44) since they both reflect an inadequate diet, and data was analyzed by camps. Of those who reported poor/borderline diets, the majority was in MLA, although this still represents a small number of HH (n=21, 47.7%).

- While most reported daily intake of protein and vitamin rich foods, iron (heme) food sources were only consumed daily by about one in three HH, little changed from 2017 (Graph 3.2).

Graph 3.2 Frequency of Consumption of Protein, Vitamin A & Heme Iron Foods, 2017-2019 (%)



DISCUSSION & RECOMMENDATIONS

CONCLUSIONS

Malnutrition Rates

Acute (wasting) malnutrition rates for children <five years of age is 'very low' (WHO, 2018) borderwide.

Chronic (stunting) malnutrition rates range between 'medium and high' (WHO, 2018). The borderwide rate is classified as 'high' but continues to show a **decreasing trend since 2013 (15.0%)**. Camps with the highest stunting rates continue to be MLO and MRML, although each notably declined by ~5.0% since 2017.

The effects of stunting are serious and lifelong. Stunting is strongly linked to learning ability and cognitive development in children; it negatively affects maternal and adult health.

Children 6-24 months of age are most vulnerable to wasting and stunting. The introduction of complementary foods and poor nutritional quality diets during infancy and early childhood lead to inadequate nutrient intake. Frequent infections during the first two years of life also contribute to the high risk wasting and/or stunting during this period.

By age group, **the highest rates of wasting (3.2%, n=37) were in children 6-23 months borderwide**. The prevalence of **stunting increased with age, peaking in the 36-47 month age group (29.8%).** This shift in a higher stunting rate in older children compared to the previous survey indicates the effectiveness of 'Healthy Babies, Bright Futures' IYCF programme. As IYCF-related practices and behaviours improve, fewer children within the 'window of opportunity' (<24 months of age) when stunting can still be corrected, are stunted.

IYCF Practices

Maternal Nutrition

ANC attendance at any time during pregnancy was high at ≥94.0% and 93.7% reported ANC attendance as soon as they knew of their pregnancy.

For maternal nutrition education, the benefits of weight gain during pregnancy were not well understood, particularly as related to the mother's health.

The most frequently reported foods that were restricted after delivery were not of significant nutritional value or benefit for the mother and child (cha-om, dogfruit, chili and fermented foods).

Best practices of food consumption during pregnancy were related to iron intake, and during breastfeeding, iron and amount of food consumed. During both pregnancy and breastfeeding, food consumption related to protein intake was poor.

There was high compliance for supplementation with iron, vitamin A and folic acid during pregnancy or breastfeeding at >87.0% for each (range 87.9%-97.6%).

Breastfeeding

Most (82.0%) followed recommended breastfeeding initiation practice (newborn put to the breast immediately or within one hour after birth).

Breastfeeding is recommended until 24 months of age; the mean (±SD) duration across all camps was 20.9 ± 0.2 months. Further, EBF (just breastmilk with no liquids or foods, including water) duration was 4.7±0 months (mean ± SD) instead of the recommended six months; however, the duration increased in every camp since 2017.

Finally, survey results showed that mothers understood EBF benefits for their children better than those related to their own health. It is likely that if benefits of EBF are better understood, then, recommended breastfeeding practices may be followed.

Overall, survey results indicate that **EBF needs continued focus** to improve related practices.

Complementary Feeding

Complementary feeding initiation as recommended at six months of age improved since the 2017 survey, with feeding prior to six months decreased from 20.0% to only 13.1% borderwide and all camps showing sustained improvement since 2015 likely related to the 'Healthy Babies, Bright Futures' IYCF programme implementation in 2014.

Micronutrient Deficiencies

Angular stomatitis is used as an easily detectable clinical indicator of micronutrient deficiency and can indicate a more widespread problem of other micronutrient deficiencies.

The rate of AS continued to decline since the 2011 Nutrition Survey, now >1.0%. While Sphere 2011 does not provide a cutoff to indicate a problem of public health significance, continued monitoring and early detection of malnutrition to include micronutrient deficiencies is essential.

SFP/TFP Enrolment

The SFP/TFP aims to treat acute malnutrition (wasting). Feeding programme enrolment indicates the effectiveness of growth monitoring as a screening tool to identify wasting in children <five years of age, and effectively implement the feeding programme to treat children.

SFP and TFP **enrolment for wasted children is low (26.7% and 28.6%, respectively),** indicating that not all malnourished children are being identified and treated. One factor contributing to the low enrolment is the very low rate of wasting in the camps for moderately and severely malnourished children (1.9% and 0.2%, respectively). The denominator is small so even one malnourished child not identified contributes to a low enrolment.

In comparison, the Annual HIS Report for 2019 reported the enrolment rate as 57% for children.

Vitamin A Supplementation

Vitamin A deficiency is a major contributor to childhood mortality and illness; supplementation is necessary to ensure adequate intake. Vitamin A supplementation **coverage was 59.7%,** not reaching the Sphere standard (>95% of children <five years of age receive six monthly preventive dose). Documenting health services which are received should be discussed amongst health partners to determine how to make needed improvements.

Anti-Helminths Prevention

Worm infections contribute to malnutrition in general, and to vitamin A deficiency and anemia. Six monthly de-worming is necessary in the refugee camps to ensure that worm infection is prevented in children. De-worming coverage was **64.1%**. This was lower than in the previous two surveys of >83.0%; however, over 1,300 child health cards in the survey had missing data for de-worming. The lower coverage rate could be due to lack of documentation; however, this should be discussed amongst health partners as above, together with vitamin A supplementation documentation.

HHS

Borderwide, **most households reported little to no hunger**.

FCS-N

The FCS-N was added to the Nutrition Survey in 2017. Most reported consuming an acceptable diet within the seven days prior to the survey (98.5%). This indicates that most HH are consuming an adequately diverse diet; however, diet quality needs improvement as only about one in three HH are consuming heme iron-rich foods daily.

Globally, iron deficiency (ID) is the most common diet-related health problem, with ID anemia affecting two billion people or over 30% of the world's population. ID may result in poor health, premature death and reduced income for individuals and populations, with implications for national development.

Heme iron comes only from meat and fish (non-heme iron comes from plants) and is better absorbed in the body than non-heme iron. Interestingly, survey participants reported following best IYCF practices during pregnancy and breastfeeding related to iron consumption (as compared to protein consumption and amount of food taken). The FCS-N indicates overall, HH are less frequently consuming iron daily (35.2%) compared to protein (88.6%) and vitamin A-rich (89.6%) foods. It is possible that the importance of iron-rich meat and fish foods is understood but is cost prohibitive for many HH in camps.

Daily vitamin A and protein consumption were high, almost reaching 90% for each (same as in the previous 2017 survey).

RECOMMENDATIONS

Stunting

Current evidence suggests that stunting may be prevented by promoting appropriate IYCF practices between 6-24 months of age, including EBF until six months of age; continued breastfeeding until two years of age, with complementary feeding initiated at six months of age; and promoting healthy maternal status.

1. Continue community based IYCF Campaign with BCC and GM&P in all camps, targeting families with children 6-24 months of age, while promoting healthy maternal status as part of the campaigns.

2. Ensure IYCF activities are relevant not only to mothers but to other family members who influence childcare decisions (e.g., grandmothers, fathers and youth).

3. Use social media platforms such as Facebook, YouTube, etc. to deliver key nutrition messages as relevant in each camp.

4. Especially with frequent camp-based staff turnover, continue to train health workers and community facilitators to collaborate and conduct uniform, intensive IYCF promotion activities in all camps using standardized ToT Nutrition Curriculum. Ensure FSN camp-based staff focal point has capacity to lead these activities.

5. Adapt current evidence and best practices into on-going and future programme planning and implementation.

IYCF Practices

Maternal Nutrition

1. Maternal nutrition education sessions are an opportunity to promote the importance of ANC visit as soon as a pregnancy is known. All IYCF-related campaigns should include this message.

2. Health benefits of weight gain for the mother during pregnancy need to be emphasized to improve understanding and support and sustain behaviour change.

3. Protein consumption during pregnancy and breastfeeding need to be promoted as many reported less frequently eating protein-rich foods when they were pregnant and breastfeeding as compared to when they were not pregnant or breastfeeding. This should also be discussed during cooking demonstrations to determine barriers to protein consumption during pregnancy and breastfeeding.

Breastfeeding

While **EBF duration improved, continued focus is needed to reach the recommendation for EBF until six months of age**. Continue to encourage and promote a supportive environment, with small group discussions.

Complementary Feeding

Include messaging in IYCF-related sessions to continue to sustain behaviour change on timing of initiating complementary feeding.

Micronutrient Deficiency – Riboflavin (Vitamin B2)

1. Continue to focus on diet diversity in nutrition key messages. Focus on foods that will provide key nutrients found in three food groups.
2. Utilize FCS vendor shops to promote diet diversity at point of sale, providing three food group education to vendors.

SFP/TFP Enrolment

1. One factor contributing to the low enrolment is the 'very low' rate of wasting for moderately and severely malnourished children (1.9% and 0.2%, respectively). With a small denominator, even one unidentified malnourished child contributes to a low enrolment rate. In comparison, the Annual HIS Report for 2019 showed the enrolment rate as 57% for children.

2. Develop new ways to identify wasted children in the community without solely relying on attendance at GM&P.

Vitamin A/De-worming

1. Continue to follow TBC SFP Guidelines 2018 vitamin A protocol for children, pregnant women and nursing mothers, documenting in standard health card.
2. Continue to provide anti-helminths six-monthly for all children 1-12 years of age, documenting de-worming in standard health card.
3. Health agencies to ensure staff understand importance and standardized location for documenting both vitamin A supplementation and de-worming.

HHS

Continue to include as part of quarterly FCS PDM surveys.

FCS-N

1. It is possible that the importance of iron-rich meat and fish sources is understood but is cost prohibitive for many HH. Integrate discussions on diet diversity and potential barriers during on-going nutrition activities, particularly targeting young girls prior to pregnancy and pregnant women.
2. Continue encouraging Asia*RE*Mix fortified flour consumption for blanket and target SFP participants. Ensure education about and barriers to including iron-rich foods are programmed in activities.
3. Examine trends in diet diversity and important macro- and micronutrients using TBC's FCS PDM surveys as they are conducted more frequently than the biennial nutrition survey.

References

1. Sphere Association. The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response, fourth edition, Geneva, Switzerland, 2018. www.spherestandards.org/handbook.
2. The World Health Organization (WHO). Micronutrient Deficiencies, at https://www.who.int/nutrition/topics/vad/en/.
3. WHO/UNICEF How to Add Deworming to Vitamin A Distribution, 2004, at https://apps.who.int/iris/bitstream/handle/10665/68770/WHO_CDS_CPE_PVC_2004.11.pdf;jsessionid=7D07864D3DA4BED8A8DA103508B4246C?sequence=1.
4. Programming Guide: Infant and Young Child Feeding. UNICEF, May 2011. Available at: https://www.unicef.org/nutrition/files/Final_IYCF_programming_guide_2011.pdf.
5. Alive & Thrive Technical Brief; Issue 2, September 2010. Kathryn g. Dewey and Khadija Begum. Why Stunting Matters? Available at, https://www.aliveandthrive.org/wp-content/uploads/2018/07/Brief-2-Why-stunting-matters_English.pdf.
6. Dewey Kathryn G; and Adu-Afarwuah, Seth. Systematic review of the efficacy and effectiveness of complementary feeding interventions in developing countries. Maternal and Child Nutrition 2008. April; (4 Suppl. 1) 24-85. Available at, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6860813/pdf/MCN-4-24.pdf.
7. Ballard, Terri; Coates, Jennifer; Swindale, Anne; and Deitchler, Megan. Household Hunger Scale: Indicator Definition and Measurement Guide. Washington, DC: FANTA-2 Bridge, FHI 360, August 2011.
8. Deitchler, Megan; Ballard, Terri; Swindale, Anne; and Coates, Jennifer. Validation of a Measure of Household Hunger for Cross-Cultural Use. Washington, DC: Food and Nutrition Technical Assistance II Project (FANTA-2), FHI 360, May 2010.
9. Deitchler, Megan; Ballard, Terri; Swindale, Anne; and Coates, Jennifer. Introducing a Measure of Household Hunger for Cross-Cultural Use. Washington, D.C.: Food and Nutrition Technical Assistance II Project, AED, 2011.
10. Food Consumption Score Nutritional Analysis (FCS-N) Guidelines. WFP, First Edition, August 2015. Available at: http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp277333.pdf?_ga=1.94408926.39164443.1487819174.
11. Food Consumption Analysis, Calculation and use of the Food Consumption Score in Food Security Analysis. WFP, Version 1, February 2008. Available at: http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp197216.pdf?_ga=2.252337165.529532173.1522399613-39164443.1487819174.
12. 2017 Nutrition Survey Report to CCSDPT Health Agencies: The Border Consortium, International Rescue Committee and Malteser International. Prepared by The Border Consortium. Available at: https://www.theborderconsortium.org/media/2017_nutri_survey_report_eng.pdf.
13. 2015 Nutrition Survey Report to CCSDPT Health Agencies: The Border Consortium, American Refugee Committee, International Rescue Committee, Malteser International and Premiére Urgence Internationale. Prepared by The Border Consortium. Available at: http://www.theborderconsortium.org/media/71604/nutrition-2015-survey-report.pdf.

14. Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, et al. Maternal and child undernutrition: global and regional exposures and health consequences. Lancet 2008 Jan 19;371(9608):243-60.
15. WHO Multicentre Growth Reference Study Group (2006), WHO Child Growth Standard.
16. Richard SA, Black RE, Gilman RH, Guerrant RL, Kang G, Lanata CF, Molbak K, Rasmussen ZA, Sack RB, Valentiner-Branth P, Checkley W. Wasting is associated with stunting in early childhood. The Journal of Nutrition May 23, 2012.
17. Stewart, CP, Iannotti, L, Dewey, KG, Michaelsen, KF and Onyango, AW. Contextualising complementary feeding in a broader framework for stunting prevention. Maternal and Child Nutrition 2013 Sep; 9 Suppl 2(Suppl 2): 27-45. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6860787/pdf/MCN-9-27.pdf.
18. Guidelines for Selective Feeding: The Management of Malnutrition in Emergencies.
19. Guidelines for Supplementary Feeding and Medical Facility Food Provision, Thailand Burma Border Consortium, 2018.
20. Burma Border Guidelines, 2016, available at: http://www.burmalibrary.org/docs22/Burma_Border_Guidelines-2016-04-19-red.pdf.
21. 2020 Global Nutrition Report: Action on equity to end malnutrition. Bristol, UK: Development Initiatives. Available at: https://globalnutritionreport.org/reports/2020-global-nutrition-report/.
22. National Statistical Office and United Nations Children's Fund, Thailand Multiple Indicator Cluster Survey 2015- 2016, Final Report, NSO and UNICEF, Bangkok, 2016. Available at: https://www.unicef.org/thailand/sites/unicef.org.thailand/files/2018-06/Thailand_MICS_Full_Report_EN_0.pdf.
23. Ministry of Health and Sports - MoHS/Myanmar and ICF. 2017. Myanmar Demographic and Health Survey 2015-16. Nay Pyi Taw, Myanmar: MoHS and ICF. Available at: https://dhsprogram.com/pubs/pdf/FR324/FR324.pdf.

APPENDIX 1

RESULTS BY CAMP

Prevalence of Global ACUTE & CHRONIC Malnutrition in Children 6 months to <5 years using WHO Growth Standards: 2011-2019

Camps	Global ACUTE Malnutrition (weight-for-height <-2 z-score)					Global CHRONIC Malnutrition (height-for-age <-2 z-score)				
	2019	2017	2015	2013	2011	2019	2017	2015	2013	2011
	%	%	%	%	%	%	%	%	%	%
Ban Mai Nai Soi	2.3	0.5	0.9	1.7	1.0	13.6	18.8	22.3	24.8	25.8
Ban Mae Surin	2.6	1.3	1.6	1.5	1.6	20.6	30.1	32.9	35.6	48.8
Mae Ra Ma Luang	2.8	3.9	3.7	2.9	2.1	33.6	38.3	38.4	49.2	48.8
Mae La Oon	2.9	4.3	2.0	2.3	1.0	36.6	41.7	40.5	49.7	53.6
Mae La	2.0	2.3	4.3	1.6	3.2	21.4	25.0	30.0	37.8	32.8
Umpiem Mai	1.9	0.9	1.1	2.0	2.2	19.2	26.0	36.6	42.6	35.7
Nu Po	1.4	2.1	0.6	0.6	1.7	28.7	34.5	39.9	37.6	43.2
Ban Don Yang	1.7	1.0	1.5	1.0	2.2	25.5	33.9	41.1	44.6	44.3
Tham Hin	1.6	0.7	1.7	4.3	3.1	25.5	34.9	34.3	42.6	40.1
All Camps:	**2.2**	**2.1**	**2.0**	**2.1**	**2.0**	**25.8**	**31.8**	**35.1**	**40.8**	**41.5**
Thailand (MICS 2015-16)		n/a	**5.4**	6.7	n/a		n/a	**10.5**	16.3	n/a
Myanmar		n/a	**7.0***	n/a	**7.9****		n/a	n/a	**29.2***	**35.1****

*DHS 2016 (Stunting prevalence ranged from 20.3% in Yangon Region to 41.0% in Chin State.)

**MICS 2009-10 (Stunting prevalence ranged from 24.0% in Yangon Region to 58.0% in Chin State.)

Table 2. Knowledge of Benefits of Weight Gain during Pregnancy

Camps	Prevent Risks Maternal Complications & Death n=2,931	Prevent Anemia in Pregnancy n=2,937	Prevent LBW & Premature Baby n=2,937	Prevent Infection for Baby & Mother n=2,937	Promote Child Growth & Development in Early Childhood n=2,937
	% (n)	% (n)	% (n)	% (n)	% (n)
BMN	24.1 (90)	15.0 (56)	16.8 (63)	40.1 (150)	66.0 (247)
BMS	37.3 (66)	18.6 (33)	14.7 (26)	7.9 (14)	79.1 (140)
MRML	4.4 (15)	24.4 (89)	21.6 (79)	12.3 (45)	55.1 (201)
MLO	44.9 (173)	40.3 (155)	48.8 (188)	56.6 (218)	82.6 (318)
MLA	10.3 (35)	1.2 (4)	12.1 (41)	4.1 (14)	56.5 (192)
UMP	2.8 (10)	8.7 (31)	5.3 (19)	17.6 (63)	87.4 (312)
NP	55.4 (189)	13.2 (45)	18.2 (62)	7.0 (24)	70.4 (240)
BDY	77.0 (144)	40.6 (76))	69.0 (129)	29.4 (55)	84.0 (157)
TH	3.6 (15)	6.1 (25)	8.3 (34)	10.7 (44)	33.6 (138)
All Camps:	**25.1 (738)**	**17.5 (514)**	**21.8 (641)**	**21.3 (627)**	**66.2 (1,945)**

Table 3. By Camp: Food Consumption during Pregnancy

	Amount of Food	Amount of Protein	Amount of Iron
BMN (n=374)			
More	62.6%	55.1%	67.6%
Less	14.2%	11.8%	5.3%
Same Amount	22.2%	32.1%	26.2%
BMS (n=177)			
More	30.5%	23.7%	34.5%
Less	13.6%	11.3%	10.2%
Same Amount	54.8%	63.8%	54.2%
MRML (n=365)			
More	48.8%	29.0%	60.8%
Less	14.8%	34.0%	10.4%
Same Amount	35.6%	35.9%	27.9%
MLO (n=385)			
More	73.0%	59.5%	73.2%
Less	9.1%	10.6%	7.0%
Same Amount	16.9%	28.6%	18.7%
MLA (n=340)			
More	64.7%	54.7%	70.6%
Less	23.2%	27.6%	15.3%
Same Amount	12.1%	17.6%	14.1%
UMP (n=357)			
More	81.5%	64.1%	83.8%
Less	3.1%	7.0%	2.8%
Same Amount	14.6%	27.7%	12.6%
NP (n=341)			
More	63.6%	59.5%	66.6%
Less	12.6%	15.5%	10.9%
Same Amount	22.3%	24.0%	22.0%
BDY (n=187)			
More	61.0%	44.4%	62.0%
Less	8.0%	10.2%	2.1%
Same Amount	29.9%	44.4%	34.8%
TH (n=411)			
More	71.8%	68.4%	72.7%
Less	22.1%	25.3%	21.7%
Same Amount	5.1%	5.4%	4.6%
Borderwide (n=2,937)			
More	64.1%	53.3%	68.1%
Less	13.8%	17.8%	10.0%
Same Amount	21.1%	27.9%	21.1%

Table 4. By Camp: Food Consumption during Breastfeeding

	Amount of Food	Amount of Protein	Amount of Iron
BMN (n=374)			
More	77.3%	66.6%	69.3%
Less	3.7%	4.3%	4.5%
Same Amount	17.6%	27.5%	24.6%
BMS (n=177)			
More	54.8%	47.5%	53.7%
Less	4.5%	5.6%	4.5%
Same Amount	39.0%	45.2%	40.1%
MRML (n=365)			
More	65.5%	43.0%	70.1%
Less	8.8%	24.4%	5.8%
Same Amount	24.9%	31.8%	22.5%
MLO (n=385)			
More	77.9%	66.0%	76.4%
Less	6.5%	7.8%	5.2%
Same Amount	14.0%	24.4%	16.9%
MLA (n=340)			
More	74.7%	64.7%	72.9%
Less	12.4%	15.9%	8.5%
Same Amount	12.6%	19.1%	17.6%
UMP (n=357)			
More	89.6%	80.7%	87.1%
Less	1.4%	2.8%	2.0%
Same Amount	8.7%	16.2%	10.1%
NP (n=341)			
More	78.3%	72.1%	76.8%
Less	5.3%	7.0%	5.3%
Same Amount	15.8%	20.2%	16.4%
BDY (n=187)			
More	58.8%	40.1%	53.5%
Less	9.1%	3.7%	1.1%
Same Amount	31.0%	55.1%	44.4%
TH (n=411)			
More	86.1%	84.4%	85.9%
Less	9.2%	11.2%	8.5%
Same Amount	3.4%	3.2%	3.9%
Borderwide (n=2,937)			
More	75.9%	65.4%	74.2%
Less	6.8%	9.7%	5.3%
Same Amount	16.3%	23.9%	19.1%

Table 5. Belief in Benefits of EBF by Camp & Border-wide

	BMN	BMS	MRML	MLO	MLA	UMP	NP	BDY	TH	ALL
Sufficient nutrients for baby	49.9	82.6	53.9	76.2	70.6	41.4	55.5	96.6	78.3	**65.1**
Promotes optimum growth & development	27.8	4.8	55.5	77.6	52.7	65.8	66.8	95.7	76.0	**59.1**
Protects baby from infections	67.8	46.9	57.1	51.4	44.7	62.5	69.8	96.6	29.0	**57.3**
Promotes bonding & motherhood	4.4	24.2	13.7	3.9	4.6	19.5	10.5	3.4	1.1	**8.9**
Decreases breast, ovarian & cervical cancers	2.5	14.5	18.9	2.2	9.0	14.0	9.7	1.7	3.6	**8.5**
Delays new pregnancy	1.1	0	15.0	2.8	5.8	12.3	8.4	11.9	0.6	**6.6**
Reduce risk of post-partum bleeding	3.0	3.9	1.3	1.7	0.5	12.3	2.4	3.8	0.6	**3.2**

1. BMN

Results Tables for WHO Growth Standard, 2006

Table 1.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:Girl**
6-11	18	46.2	21	53.8	39	9.2	0.9
12-23	30	37.0	51	63.0	81	19.0	0.6
24-35	56	49.1	58	50.9	114	26.8	1.0
36-47	51	52.0	47	48.0	98	23.0	1.1
48-59	49	52.1	45	47.9	94	22.1	1.1
Total	204	47.9	222	52.1	426		0.9

Table 1.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 416	**Boys** n = 204	**Girls** n = 222
Prevalence of global malnutrition (<-2 z-score)	(10) 2.3 % (1.3 – 4.4 95% C.I.)	(7) 3.4 % (1.7 – 6.9 95% C.I.)	(3) 1.4 % (0.5 – 3.9 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(9) 2.1 % (1.1 – 4.1 95% C.I.)	(7) 3.4 % (1.7 – 6.9 95% C.I.)	(2) 0.9 % (0.3– 3.1 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(1) 0.2 % (0.0 – 1.4 95% C.I.)	(0) (0.0 – 1.9 95% C.I.)	(1) 0.2 % (0.1 – 2.5 95% C.I.)

Table 1.3: Prevalence of acute malnutrition by age (weight-for-height z-score)

		Severe wasting (<-3 z-score)		**Moderate wasting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	39	0		2	5.1	37	94.9
12-23	81	0		2	2.5	79	97.5
24-35	114	1	0.9	3	2.6	110	96.5
36-47	98	0		1	1.0	97	99.0
48-59	94	0		1	1.1	93	98.9
Total	426	1	0.2	9	2.1	416	97.7

2. BMN (con't)

Table 1.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 426	**Boys** n = 204	**Girls** n = 222
Prevalence of stunting (<-2 z-score)	(58) 13.6 % (10.7 – 17.2 95% C.I.)	(26) 12.7 % (8.9 – 18.0 95% C.I.)	(32) 14.4 % (10.4 – 19.6 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(52) 12.2 % (9.4 – 15.7 95% C.I.)	(23) 11.3 % (7.6 – 16.3 95% C.I.)	(29) 13.1 % (9.3 – 18.1 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(6) 1.4% (0.7 – 3.0 95% C.I.)	(3) 1.5% (0.5 – 4.2 95% C.I.)	(3) 1.4 % (0.5 – 3.9 95% C.I.)

Table 1.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	39	0		2	5.1	37	94.9
12-23	81	1	1.2	11	13.6	69	85.2
24-35	114	2	1.8	12	10.5	100	87.7
36-47	98	2	2.0	13	13.3	83	84.7
48-59	94	1	1.1	14	14.9	79	84.0
Total	426	6	1.4	52	12.2	368	86.4

2. BMS

Results Tables for WHO Growth Standard, 2006

Table 2.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:Girl**
6-11	14	70.0	6	30.0	20	8.6	2.3
12-23	21	47.8	23	52.2	44	18.9	0.9
24-35	29	53.7	25	46.3	54	23.2	1.2
36-47	20	45.5	24	54.5	44	18.9	0.8
48-59	33	46.5	38	53.5	71	30.5	0.9
Total	117	50.2	116	49.8	233		1.0

Table 2.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 233	**Boys** n **=** 117	**Girls** n **=** 116
Prevalence of global malnutrition (<-2 z-score)	(6) 2.6 % (1.2 – 5.5 95% C.I.)	(5) 4.3 % (1.8 – 4.3 95% C.I.)	(1) 0.9 % (0.2 – 4.7 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(5) 2.1 % (0.9 – 4.9 95% C.I.)	(4) 3.4 % (1.3 – 8.5 95% C.I.)	(1) 0.9 % (0.2 – 4.7 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(1) 0.4 % (0.1 – 2.4 95% C.I.)	(1) 0.9 % (0.2 – 4.7 95% C.I.)	(0) (0.0 – 3.2 95% C.I.)

Table 2.3: Prevalence of acute malnutrition by age (weight-for-height z-score)

		Severe wasting (<-3 z-score)		**Moderate wasting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	20	0		0		20	100.0
12-23	44	0		1	2.3	43	97.7
24-35	54	1	1.9	1	1.9	52	96.3
36-47	44	0		2	4.5	42	95.5
48-59	71	0		1	1.4	70	98.6
Total	233	1	0.4	5	2.1	227	72.5

2. BMS (con't)

Table 2.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 233	**Boys** n = 117	**Girls** n = 116
Prevalence of stunting (<-2 z-score)	(48) 20.6 % (15.9 – 26.3 95% C.I.)	(28) 23.9 % (17.11 – 32.4 95% C.I.)	(20) 17.2 % (11.5 – 25.1 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(45) 19.3 % (14.8 – 24.9 95% C.I.)	(27) 23.1 % (16.7 – 31.5 95% C.I.)	(18) 15.5 % (10.1 – 23.2 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(3) 1.3 % (0.4 – 3.7 95% C.I.)	(1) 0.9% (0.2 – 4.7 95% C.I.)	(2) 1.7 % (0.5 – 6.1 95% C.I.)

Table 2.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	20	0		2	10.0	18	90.0
12-23	44	1	2.3	2	4.5	41	93.2
24-35	54	0		9	16.7	45	83.3
36-47	44	1	2.3	11	25.0	32	72.2
48-59	71	1	1.4	21	29.6	49	69.0
Total	233	3	1.3	45	19.3	185	79.4

3. Mae Ra Ma Luang

Results Tables for WHO Growth Standard, 2006

Table 3.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:Girl**
6-11	32	57.1	24	42.9	56	10.5	1.3
12-23	57	46.7	65	53.3	122	22.8	0.9
24-35	59	51.8	55	48.2	114	21.3	1.1
36-47	68	51.1	65	51.1	133	24.9	1.0
48-59	55	50.0	55	50.0	110	20.6	1.0
Total	271	50.7	264	49.3	535		1.0

Table 3.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 535	**Boys** n = 271	**Girls** n = 264
Prevalence of global malnutrition (<-2 z-score)	(15) 2.8 % (1.7 – 4.6 95% C.I.)	(5) 1.8 % (0.8– 4.3 95% C.I.)	(10) 3.8 % (2.1 – 6.8 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(13) 2.4 % (1.4– 4.1 95% C.I.)	(4) 1.5 % (0.6 – 3.7 95% C.I.)	(9) 3.4 % (1.8 – 6.4 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(2) 0.4 % (0.1 – 1.4 95% C.I.)	(1) 0.4 % (0.1 – 2.1 95% C.I.)	(1) 0.4 % (0.1 – 2.1 95% C.I.)

Table 3.3: Prevalence of acute malnutrition by age (weight-for-height z-score)

		Severe wasting (<-3 z-score)		**Moderate wasting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	***Total no.***	***No.***	***%***	***No.***	***%***	***No.***	***%***
6-11	56	2	3.6	1	1.8	53	94.6
12-23	122	0		3	2.5	119	97.5
24-35	114	0		4	3.5	110	96.5
36-47	133	0		4	3.0	129	97.0
48-59	110	0		1	0.9	109	99.1
Total	535	2	0.4	13	2.4	520	97.2

3. Mae Ra Ma Luang (con't)

Table 3.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 535	**Boys** n = 271	**Girls** n = 264
Prevalence of stunting (<-2 z-score)	(180) 33.6 % (29.8 – 37.8 95% C.I.)	(93) 34.3 % (28.9 – 40.2 95% C.I.)	(87) 33.0 % (27.6 – 38.9 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(142) 26.4 % (23.0 – 30.4 95% C.I.)	(72) 26.6 % (21.7 – 32.1 95% C.I.)	(70) 26.5 % (21.6 – 32.2 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(38) 7.1 % (5.2 – 9.6 95% C.I.)	(21) 7.7 % (5.1 – 11.6 95% C.I.)	(17) 6.4 % (4.1 – 10.1 95% C.I.)

Table 3.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	56	1	19	8	14.3	47	83.9
12-23	122	9	7.4	29	23.8	84	68.9
24-35	114	10	8.8	39	34.2	65	57.0
36-47	133	5	3.8	43	32.3	85	63.9
48-59	110	13	11.8	23	20.9	74	67.3
Total	535	38	7.1	142	26.5	355	61.7

4. Mae La Oon

Results Tables for WHO Growth Standard, 2006

Table 4.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:Girl**
6-11	29	54.7	24	45.3	53	9.5	1.2
12-23	64	48.5	68	51.5	132	23.6	0.9
24-35	66	52.8	59	47.2	125	22.3	1.1
36-47	69	50.4	68	49.6	137	24.5	1.0
48-59	67	59.3	46	40.7	113	20.2	1.5
Total	295	52.7	265	47.3	560		1.1

Table 4.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 560	**Boys** n = 295	**Girls** n = 265
Prevalence of global malnutrition (<-2 z-score)	(16) 2.9 % (1.2 – 4.6 95% C.I.)	(9) 3.1 % (1.6 – 5.7 95% C.I.)	(7) 2.6 % (1.3 – 5.4 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(16) 2.9 % (1.2 – 4.6 95% C.I.)	(9) 3.1 % (1.6 – 5.7 95% C.I.)	(7) 2.6 % (1.3 – 5.4 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(0) (0.0 – 0.7 95% C.I.)	(0) (0.0 – 1.3 95% C.I.)	(0) (0.0 – 1.4 95% C.I.)

Table 4.3: Prevalence of acute malnutrition by age (weight-for-height z-score)

		Severe wasting (<-3 z-score)		**Moderate wasting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	53	0		3	5.7	50	94.3
12-23	132	0		4	3.08	128	97.0
24-35	125	0		3	2.4	122	97.6
36-47	137	0		4	2.9	133	97.1
48-59	113	0		2	1.8	111	98.2
Total	560	0		16	2.9	544	97.1

4. Mae La Oon (con't)

Table 4.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 560	**Boys** n = 295	**Girls** n = 265
Prevalence of stunting (<-2 z-score)	(205) 36.6 % (32.7 – 40.7 95% C.I.)	(102) 34.6 % (29.4 – 40.2 95% C.I.)	(103) 38.9 % (33.2 – 44.9 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(161) 28.8 % (25.2 – 32.6 95% C.I.)	(82) 27.8 % (23.0 – 33.2 95% C.I.)	(79) 29.8 % (24.6 – 35.6 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(44) 7.9 % (5.9 – 10.4 95% C.I.)	(20) 6.8 % (4.4 – 10.2 95% C.I.)	(24) 9.1 % (6.2 – 13.1 95% C.I.)

Table 4.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	53	0		6	11.3	47	88.7
12-23	132	12	9.1	40	30.3	80	60.6
24-35	125	12	9.6	32	25.6	81	64.8
36-47	137	15	10.9	46	33.6	76	55.5
48-59	113	5	4.4	37	32.7	71	62.8
Total	560	44	7.9	161	28.8	355	63.4

5. Mae La

Results Tables for WHO Growth Standard, 2006

Table 5.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:Girl**
6-11	23	47.9	25	52.1	48	10.8	0.9
12-23	49	50.5	48	49.5	97	21.8	1.0
24-35	52	48.1	56	51.9	108	24.3	0.9
36-47	49	55.7	39	44.3	88	19.8	1.3
48-59	49	47.6	54	52.5	103	23.2	0.9
Total	222	50.0	222	50.0	444		1.0

Table 5.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 444	**Boys** n = 222	**Girls** n = 222
Prevalence of global malnutrition (<-2 z-score)	(9) 2.0 % (1.0- 3.8 95% C.I.)	(6) 2.7 % (1.2- 5.8 95% C.I.)	(3) 1.4 % (0.5- 3.9 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(8) 1.8 % (0.9- 3.5 95% C.I.)	(5) 2.3 % (1.2- 5.3 95% C.I.)	(3) 1.4 % (0.5- 3.9 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(1) 0.2 % (0.0- 1.3 95% C.I.)	(1) 0.5 % (0.1- 2.5 95% C.I.)	(0) (0.0- 1.7 95% C.I.)

Table 5.3: Prevalence of acute malnutrition by age (weight-for-height z-score)

		Severe wasting (<-3 z-score)		Moderate wasting (>= -3 and <-2 z-score)		Normal (> = -2 z score)	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	48	0		1	2.1	47	97.9
12-23	97	1	1.0	5	5.2	91	93.8
24-35	108	0		2	1.9	106	98.1
36-47	88	0		0		88	100.0
48-59	103	0		0		103	100.0
Total	444	1	0.2	8	1.8	435	99.1

5. Mae La (con't)

Table 5.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 444	**Boys** n = 222	**Girls** n = 222
Prevalence of stunting (<-2 z-score)	(95) 21.4 % (17.8 - 25.5 95% C.I.)	(49) 22.1 % (17.1 – 28.0 95% C.I.)	(46) 20.7 % (15.9 - 26.5 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(75) 16.9 % (13.7 - 20.7 95% C.I.)	(40) 18.0 % (13.5 – 23.6 95% C.I.)	(35) 15.8 % (11.6 – 21.1 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(20) 4.5 % (2.9 – 6.9 95% C.I.)	(9) 4.1 % (2.1 - 7.5 95% C.I.)	(11) 5.0 % (2.8 – 8.7 95% C.I.)

Table 5.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	48	0		1	2.1	47	97.9
12-23	97	5	5.2	17	17.5	75	77.3
24-35	108	4	3.7	14	13.0	90	83.3
36-47	88	6	6.8	23	26.1	59	67.0
48-59	103	5	4.9	20	19.4	78	75.7
Total	444	20	4.5	75	16.9	349	78.6

6. Umpiem Mai

Results Tables for WHO Growth Standard, 2006

Table 6.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	no.	%	no.	%	no.	%	Boy:Girl
6-11	13	35.1	24	64.9	37	8.6	0.5
12-23	35	44.9	43	55.1	78	18.2	0.8
24-35	60	58.3	43	41.7	103	24.1	1.4
36-47	57	51.4	54	48.6	111	25.9	1.1
48-59	51	51.5	48	48.5	99	23.1	1.1
Total	216	50.5	212	49.5	428		1.0

Table 6.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 428	Boys n = 216	Girls n = 212
Prevalence of global malnutrition (<-2 z-score)	(8) 1.9 % (1.0 – 3.7 95% C.I.)	(4) 1.9 % (0.7 - 4.7 95% C.I.)	(4) 1.9 % (0.7 - 4.8 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(7) 1.6 % (0.8 – 3.3 95% C.I.)	(4) 1.9 % (0.7- 4.7 95% C.I.)	(3) 1.4 % (0.5 - 4.1 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(1) 0.2 % (0.0 – 1.3 95% C.I.)	(0) (0.0 - 1.8 95% C.I.)	(1) 0.5 % (0.1- 2.6 95% C.I.)

Table 6.3: Prevalence of acute malnutrition by age (weight-for-height z-score)

		Severe wasting (<-3 z-score)		Moderate wasting (>= -3 and <-2 z-score)		Normal (> = -2 z score)	
Age (mo)	Total no.	No.	%	No.	%	No.	%
6-11	37	0		1	2.7	36	97.3
12-23	78	1	1.3	1	1.3	76	97.4
24-35	103	0		2	1.9	101	98.1
36-47	111	0		1	0.9	110	99.8
48-59	99	0		2	2.0	97	98.0
Total	428	1	0.2	7	1.6	420	98.1

6. Umpiem Mai (con't)

Table 6.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 428	**Boys** n = 216	**Girls** n = 212
Prevalence of stunting (<-2 z-score)	(82) 19.2 % (15.7 - 23.2 95% C.I.)	(44) 20.4 % (15.5 – 26.2 95% C.I.)	(38) 17.9 % (13.3 - 23.6 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(67) 15.7 % (12.5 - 19.4 95% C.I.)	(33) 15.3 % (11.1- 20.7 95% C.I.)	(34) 16.0 % (11.7 – 21.6 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(15) 3.5 % (2.1 – 5.7 95% C.I.)	(11) 5.1 % (2.9 – 8.9 95% C.I.)	(4) 1.9 % (0.7 – 4.8 95% C.I.)

Table 6.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	37	1	2.7	4	10.8	32	86.5
12-23	78	4	5.1	11	14.1	63	80.8
24-35	103	3	2.9	17	16.5	83	80.6
36-47	111	3	2.7	18	16.2	90	81.1
48-59	99	4	4.0	17	17.2	78	78.8
Total	428	15	3.5	67	15.7	346	80.8

7. Nu Po

Results Tables for WHO Growth Standard, 2006

Table 7.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:Girl**
6-11	20	44.4	25	55.6	45	10.6	0.8
12-23	43	50.6	42	49.4	85	20.0	1.0
24-35	48	49.0	50	51.0	98	23.1	1.0
36-47	56	55.4	45	44.6	101	23.8	1.2
48-59	49	51.0	47	49.0	96	22.6	1.0
Total	216	50.8	209	49.2	425		1.0

Table 7.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 425	**Boys** n = 216	**Girls** n = 209
Prevalence of global malnutrition (<-2 z-score)	(6) 1.4 % (0.7 – 3.0 95% C.I.)	(4) 1.9 % (0.7 – 4.7 95% C.I.)	(2) 1.0 % (0.3 – 3.4 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(6) 1.4 % (0.7 – 3.0 95% C.I.)	(4) 1.9 % (0.7 – 4.7 95% C.I.)	(2) 1.0 % (0.3 – 3.4 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(0) (0.0 – 0.9 95% C.I.)	(0) (0.0 – 1.8 95% C.I.)	(0) (0.0 - 1.8 95% C.I.)

Table 7.3: Prevalence of acute malnutrition by age (on weight-for-height z-score)

		Severe wasting (<-3 z-score)		**Moderate wasting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	45	0		1	2.2	44	97.8
12-23	85	0		3	3.5	82	96.5
24-35	98	0		1	1.0	97	99.0
36-47	101	0		1	1.0	100	99.0
48-59	96	0		0		96	100.0
Total	425	0		6	1.4	419	98.6

7. Nu Po (con't)

Table 7.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 425	**Boys** n = 216	**Girls** n = 209
Prevalence of stunting (<-2 z-score)	(122) 28.7 % (24.6 – 33.2 95% C.I.)	(50) 23.1 % (18.0 – 29.2 95% C.I.)	(72) 34.4 % (28.3 – 41.1 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(100) 23.5 % (19.8 – 27.8 95% C.I.)	(41) 19.0 % (14.3 – 24.7 95% C.I.)	(59) 28.2 % (22.6 – 34.7 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(22) 5.2 % (3.5 – 7.7 95% C.I.)	(9) 4.2 % (2.2 – 7.7 95% C.I.)	(13) 6.2 % (3.7 – 10.4 95% C.I.)

Table 7.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	45	0		4	8.9	41	91.1
12-23	85	9	10.6	19	22.4	57	67.1
24-35	98	4	4.1	30	30.6	64	65.3
36-47	101	5	5.0	24	23.8	72	71.3
48-59	96	4	4.2	23	24.0	69	71.9
Total	425	22	5.2	100	23.5	303	71.3

8. Ban Don Yang

Results Tables for WHO Growth Standard, 2006

Table 8.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:Girl**
6-11	16	51.6	15	48.4	31	13.0	1.1
12-23	20	50.0	20	50.0	40	16.7	1.0
24-35	36	52.2	33	47.8	69	28.9	1.1
36-47	28	51.9	26	48.1	54	22.6	1.1
48-59	24	53.3	21	46.7	45	18.8	1.1
Total	124	51.9	115	48.1	239		1.1

Table 8.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 239	**Boys** n = 124	**Girls** n = 115
Prevalence of global malnutrition (<-2 z-score)	(4) 1.7 % (0.7 - 4.2 95% C.I.)	(1) 0.8 % (0.1- 4.4 95% C.I.)	(3) 2.6 % (0.9- 7.4 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(4) 1.7 % (0.7 – 4.2 95% C.I.)	(1) 0.8 % (0.1- 4.4 95% C.I.)	(3) 2.6 % (0.9- 7.4 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(0) (0.0- 1.6 95% C.I.)	(0) (0.0- 3.0 95% C.I.)	(0) (0.0- 3.2 95% C.I.)

Table 8.3: Prevalence of acute malnutrition by age (weight-for-height z-score)

		Severe wasting (<-3 z-score)		**Moderate wasting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	31	0		0		31	100.0
12-23	40	0		1	2.5	39	97.5
24-35	69	0		2	2.9	67	97.1
36-47	54	0		0		54	100.0
48-59	45	0		1	2.2	44	97.8
Total	239	0		4	1.7	235	98.3

8. Ban Don Yang

Table 8.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 239	**Boys** n = 124	**Girls** n = 115
Prevalence of stunting (<-2 z-score)	(61) 25.5 % (20.4-25.5 95% C.I.)	(28) 22.6 % (16.1 – 30.1 95% C.I.)	(33) 28.7 % (21.2 – 37.6 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(48) 20.1 % (15.5 – 25.6 95% C.I.)	(20) 16.1 % (10.7 - 23.6 95% C.I.)	(28) 24.2 % (17.4 – 32.9 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(13) 5.4 % (3.2 - 9.1 95% C.I.)	(8) 6.5 % (3.3 – 12.2 95% C.I.)	(5) 4.3 % (1.9 – 9.8 95% C.I.)

Table 8.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	31	1	3.2	4	12.9	26	83.9
12-23	40	1	2.5	4	10.0	35	87.5
24-35	69	6	8.7	13	18.8	50	72.5
36-47	54	3	5.6	15	27.8	36	66.7
48-59	45	2	4.4	12	26.7	31	68.9
Total	239	13	5.4	48	20.1	178	74.5

9. Tham Hin

Results Tables for WHO Growth Standard, 2006

Table 9.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	no.	%	no.	%	no.	%	Boy:Girl
6-11	21	43.8	27	56.2	48	9.8	0.8
12-23	60	60.0	40	40.0	100	20.4	1.5
24-35	51	49.5	52	50.5	103	21.0	1.0
36-47	62	51.2	59	48.8	121	24.7	1.1
48-59	62	51.7	56	47.5	118	24.1	1.1
Total	256	52.2	234	47.8	490		1.1

Table 9.2: Prevalence of acute malnutrition (weight-for-height z-score) by sex

	All n = 490	Boys n = 256	Girls n = 234
Prevalence of global malnutrition (<-2 z-score)	(8) 1.6 % (0.8 - 3.2 95% C.I.)	(8) 3.1 % (1.6 - 6.1 95% C.I.)	(0) (0.0 – 1.6 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score)	(7) 1.4 % (0.7 - 2.9 95% C.I.)	(7) 2.7 % (1.3 – 5.5 95% C.I.)	(0) (0.0 - 1.6 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score)	(1) 0.2 % (0.0 – 1.1 95% C.I.)	(1) 0.4 % (0.0 – 2.2 95% C.I.)	(0) (0.0 - 1.6 95% C.I.)

Table 9.3: Prevalence of acute malnutrition by age (on weight-for-height z-score)

		Severe wasting (<-3 z-score)		Moderate wasting (>= -3 and <-2 z-score)		Normal (> = -2 z score)	
Age (mo)	Total no.	No.	%	No.	%	No.	%
6-11	48	0		1	2.1	47	97.9
12-23	100	0		3	3.0	97	97.0
24-35	103	0		2	1.9	101	98.1
36-47	121	0		0		121	100.0
48-59	118	1	0.8	1	0.8	116	98.3
Total	490	1	0.2	7	1.4	482	98.4

9. Tham Hin (con't)

Table 9.4: Prevalence of stunting (height-for-age z-score) by sex

	All n = 490	**Boys** n = 256	**Girls** n = 234
Prevalence of stunting (<-2 z-score)	(125) 25.5 % (21.9- 29.6 95% C.I.)	(73) 28.5 % (23.3 - 34.3 95% C.I.)	(52) 22.2 % (17.4 - 28.0 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(100) 20.4 % (17.1 – 24.2 95% C.I.)	(56) 21.9 % (17.3 – 27.3 95% C.I.)	(44) 18.8 % (14.3 – 24.3 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(25) 5.1 % (3.5 – 7.4 95% C.I.)	(17) 6.6 % (4.2 - 10.4 95% C.I.)	(8) 3.4 % (1.7 – 6.6 95% C.I.)

Table 9.5: Prevalence of stunting by age (height-for-age z-score)

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-11	48	2	4.2	6	12.5	40	83.3
12-23	100	6	6.0	16	16.0	78	78.0
24-35	103	4	3.9	21	20.4	78	75.7
36-47	121	4	3.3	27	22.3	90	74.4
48-59	118	9	7.6	30	25.4	79	66.9
Total	490	25	5.1	100	20.4	365	74.5

APPENDIX 2

SURVEY FORM

Youngest child ဖိအဆံးကတၢ်တဂၤ _____Yesမ့ၢ်/ _____Noတမ့ၢ်

Number/ID_____ *(Refer to survey list)*
နိၵ်ဂ်ၢ်/နိၢ်ကစၢ်နိၵ်ဂ်ၢ် *(မၤန့ၢ်အိၤလၢတၢ်ဃုသ့ၵ်ညါတၢ်အစရီပူၤ)*

Today's Date_____
တနံၤအံၤအမုၢ်နံၤမုၢ်သိ

Child's Name_____ Child's PIN number _____ *(Refer to ration book)*
ဖိသၣ်အမံၤ ဖိသၣ်နိၢ်ကစၢ်အနိၵ်ဂ်ၢ် *(မၤန့ၢ်အိၤလၢဃ်ာ်နီၤလီၤတၢ်အိၵ်အစရီပူၤ)*

Camp ဒဲကဝီၤ_____Zone ကဝီဖိၵ်/ဖိၤန် _____ Section ကဝီၤဒ့_____ House Noဟဲၵ်နိၵ်ဂ်ၢ် _____

(If registrar finds child is older than 5 years, please ask the mother to see Pink Book.)
(ပှၤထၢစရီဖိတဂၤမ့ၢ်ထဲၵ်လဖိသၣ်အံၤအသးနံၵ်အါန့ၢ်၅နံၵ်ဆူအဖိခိၵ်နူၵ်, ဝံသးစူၤဃ့ကွၢ်အမိၢ်လၢမိၢ်ဒၤလဲးမး(လာ်ပါယီၢ် ဒီးဖိသၣ်ကၵ်ကွဲၵ်ဆ့လဲးမး)တဘၣ်နူၵ်တက့ၢ်.)

HOUSEHOLD INFORMATION ဟဲၵ်နူၵ်ဃီထၣအတၢ်ဂ့ၢ်တၢ်ကျိုး

1. Do you live in the same household as **this child**?မ့ၢ်နအိၵ်လၢဟဲၵ်တဖျၵ်ဃီအပူၤဒီးဖိသၣ်အဝဲအံၤနူၵ်ဖါ.

(1)☐ Yes အိၵ်တပူၤဃီ (2)☐No တအိၵ်တပူၤဃီ

1a.What is your relationship with **this child**?နတၢ်ဘၣ်ထွဲလာ်သးဒီးဖိသၣ်တဂၤအံၤဒ်လဲၵ်.

(1)☐ Father ပၢ်
(2)☐ Motherမိၢ်
(3)☐ Aunty/Uncle မုၢ်ဂၢ်/ဖါတံၢ်
(4)☐ Sister/Brother ဒီပုၢ်ဝဲၢ်မုၵ်/ဒီပုၢ်ဝဲၢ်ခွါ
(5)☐ Grandparents ဖံဖု
(6)☐ Neighbour အိၵ်ဟံၵ်ဘူးလာ်သး
(7)☐ Other အဂုၤအဂၤ (*specify*) ဟ်ဖျါလီၤတၢ်လီၤဆဲး:_____

2. How long has **this child** lived in the camp (including time spent in other camps)?
ဖိသၣ်အဝဲအံၤနူၵ်အိၵ်လၢဲကဝီဖူၤယာ်ဆံးယာ်လဲလဲၵ်. (ဟ်ဃာ်ဒီးအအိၵ်လၢဲကဝီၤအဂုၤအဂၤတဖၣ်အပူၤ)

(1) ☐ Less than 1 year စုၤန့ၢ်တနံၵ်
(2) ☐1 year to less than 2 years ၁နံၵ်-စုၤန့ၢ်၂နံၵ်
(3)☐ 2-5 years ၂နံၵ်-၅နံၵ်
(999)☐ Don't knowတသ့ၵ်ညါဘၣ်

3. How many people live in the same house as **this child** (*Includes everyone living in this household, including this child, and even persons not registered in the ration book*)?_____ total number of persons
ပှၤအိၵ်တပူၤဃီဒီးဖိသၣ်အံၤလၢဟံၵ်တဖျၵ်ဃီအပူၤနူၵ်အိၵ်ပဲၤဂၤလဲၵ်. (ဟ်ဃာ်ဒီးပှၤကိးဂၤအိၵ်လၢဟံၵ်ဃီတဖျၵ်အံၤအပူၤ, ဟ်ဃာ်ဝဲဖိသၣ်တဂၤအံၤအနိၢ်ကစၢ်ဃာ်ဒီးပှၤအိၵ်လၢဟံၵ်ပူၤလာဆဲးလီၤမံၤလၢဃ်ာ်နီၤလီၤတၢ်အိၵ်စရီပူၤတဖၣ်)

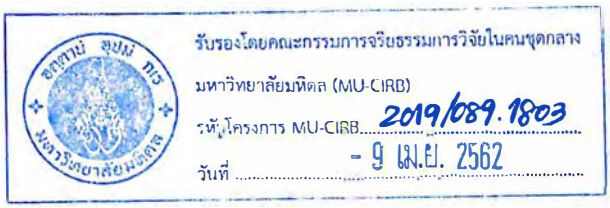
3a. No. of people ပှၤနိၵ်ဂ်ၢ် (1)<5yrsစုၤန့ၢ်၅နံၵ်_____ (2)5-17yrs ၅နံၵ်-၁၇နံၵ်_____
(3)18+yrsဒဝနံၵ်ဆူဖိခိၵ်_____

4. How many of HH members are listed on TBC ration book? (*Take information from ration book.*)
ဟံၵ်ဖိယီဖိအနိၵ်ဂ်ၢ်အိၵ်ပဲၤဂၤအိၵ်လၢထံၵ်ဘံၵ်စံၵ်အလ်ာ်နီၤလီၤတၢ်အိၵ်စရီအပူၤနူၵ်လဲၵ်.(ဟံၤန့ၢ်တၢ်ဂ့ၢ်လၢဃ်ာ်နီၤလီၤတၢ်အိၵ်စရီအပူၤ)

_____persons ဂၤ (998)☐Don't have ration book လာ်နီၤလီၤတၢ်အိၵ်တအိၵ်
(999)☐Don't know တသ့ၵ်ညါဘၣ်

4a.Refer to ration book–what is HH ration book stamped:
(မၤန့ၢ်အိၤလၢဃ်ာ်နီၤလီၤတၢ်အိၵ်စရီပူၤ) – ဟံၵ်နူၵ်ဃီထၣအလ်ာ်နီၤလီၤတၢ်အိၵ်စရီနူၵ်တၢ်တိၢ်လီၤတၢ်စဲပနိၵ်လၣအပူၤမ့ၢ်မနုၤလဲၵ်.

(1) ☐SR ပှၤလၣအဆၣထဉ်လၣအခိၵ်နူၵ်ဒီးလုၢ်အိၵ်လုၢ်အိလီၤသးနူၵ်
(2) ☐MV ပှၤတၢ်အိၵ်သးနုးနးကျဲၤကျဲၤကတၢ်
(3) ☐V ပှၤနးနးကျဲၤကျဲၤ
(4) ☐Standard Rationတၢ်ဟ့ၵ်နီၤလီၤပှၤဃတိၢ်မ့ၢ်
(999)☐Don't knowတသ့ၵ်ညါဘၣ်



5. What is the highest grade of education the mother of **this child** completed? (Not including kindergarten)

ဖိသည်အမိ်တဂၤအံၤန္ဥ်မၤလိဘဉ်အတိၤထိကတ၊်ပဲ့ၤတိၤလဲဉ်တပဉ်ဃုာ်ဒီးခ့ဉ်ကွံဉ်တိၤဘဉ်

_____Grade တိၤ (998) ☐Did not attend school တမၤလိဘဉ်တ၊်ဘဉ်(999) ☐Don't know တသ့ဉ်ညါဘဉ်

6. Which ethnicity does your family most closely identify with?
နဟံဉ်ဖိဃိဖန္ဥ်ဘဉ်တ၊်သ့ဉ်ညါအီၤအဘူးကတ၊်လၤအမ့၊်ကလုာ်ဖဲလဲဉ်တကလုာ်လဲဉ်.

(1)☐Karen (Sgaw / Pwo/ PaOo)စ်ၤ/ပှ်ၤ/တီသူ
(2)☐Karenniကရ၁ဉ်နံဉ်
(3)☐Burmese Muslimဖယီၤမူးစလ့ဉ်
(4)☐Arakan ရာ်ခၣ်
(5)☐Burma ပှၤဖယီၤဖိ
(6) ☐Mon တလၤ
(7) ☐Shan ပှၤယီၤဖိ
(8) ☐Kachin ကခ့ဉ်
(9) ☐Chin ခ္ဉီ
(10)☐Other ကလုာ်အဂုၤအဂၤ_____

CHILD HEALTH CARDဖိသဉ်တ၊်အိဉ်ဆူဉ်အိဉ်ချ့အလဲးမးက့

7. Sex မုဉ်/ခွါ (1)☐Male ခွါ (2)☐Female မုဉ်
(Refer to child or mother health card/lemma) (လၢဖိသဉ်မ့တမ့၊်မိ၊်တ၊်အိဉ်ဆူဉ်အိဉ်ချ့အလဲးမး/တ၊်မၤနီဉ်အပူၤ)

8. What is **this child's** birth date? ဖိသဉ်တစၢအံၤအိဉ်ဖျဉ်မ့၊်နံၤမ့၊်သိအနံဉ်အလါမ့၊်မနုၤလဲဉ်.
(*Take child's birth date only from Pink Book /child or mother health card. If not available, leave blank & check below No Pink Book/child or mother health card.*)
(ဟံးန္၊်ဖိသဉ်အိဉ်ဖျဉ်မ့၊်နံၤမ့၊်သိအနံဉ်အလါထဲလ၊(မိ၊်ဒၤလဲးမး(လံာ်ပါယီ၊်)မ့တမ့၊်)/ဖိသဉ်ကဉ်ကွဲဉ်ဆ့အလဲးမးက့အပူၤမ့၊်တအိဉ်ဘဉ်နူဉ် ဟ်လီၤဟိတ၊်အိဉ်ဖျဉ်မ့၊်နံၤမ့၊်သိအလိ၊်ဒီးမၤနီဉ်လီၤအီၤလၢတ၊်ဖီလာ်လၢမိ၊်ဒၤလဲးမး(လံာ်ပါယီ၊်မ့တမ့၊်ကဉ်ကွဲဉ်ဆ့လဲးမး)တအိဉ်ဘဉ်.)

Day (dd) မ့၊်နံၤ_____ Month(mm) လါ_____ Year (yyyy) နံ့ဉ်_____ (999)☐Don't know တသ့ဉ်ညါဘဉ်
(998)☐No Pink Book/child or mother health card မိ၊်ဒၤလဲးမး((လံာ်ပါယီ၊်)ဖိသဉ်ကဉ်ကွဲဉ်ဆ့လဲးမ့းတအိဉ်ဘဉ်.

9. Birth weight အိဉ်ဖျဉ်အတယ၊်ဃၤ _____g ကြဲဉ်မ် OR မ့တမ့၊်_____kg ကံလိ
(*Take child's birth weight only from Pink Book /child or mother health card. If not available, leave blank & check below No Pink Book/child or mother health card.*)
(ဟံးန္၊်ဖိသဉ်အိဉ်ဖျဉ်မ့၊်နံၤမ့၊်သိအနံဉ်အလါထဲလ၊မိ၊်ဒၤလဲးမး(လံာ်ပါယီ၊်မ့တမ့၊်ဖိသဉ်ကဉ်ကွဲဉ်ဆ့လဲးမး)/အပူၤမ့၊်တအိဉ်ဘဉ်နူဉ်ဟ်လီၤဟိ တတယ၊်ဃၤအလိ၊်ဒီးမၤနီဉ်လီၤအီၤလၢတ၊်ဖီလာ်လၢမိ၊်ဒၤလဲးမး(လံာ်ပါယီ၊်မ့တမ့၊်ဖိသဉ်ကဉ်ကွဲဉ်ဆ့လဲးမး)တအိဉ်ဘဉ်.)
(998)☐ No Pink Book/ child or mother healthcard မိ၊်ဒၤလဲးမး(လံာ်ပါယီ၊်)တအိဉ်ဖိသဉ်ကဉ်ကွဲဉ်ဆ့အလဲးမ့းတအိဉ်ဘဉ်.
(999)☐ Don't know တသ့ဉ်ညါဘဉ်

10. Does **this child** attend nursery school in camp? (*Does not include kindergarten.)*
မ့၊်ဖိသဉ်အဝဲအံၤထိဉ်ဝဲတီၤဘျိကွိလၤဇဲကဝီၤအပူၤန္ဥ်စ၊. (သံကွ၊်အမိ၊် – တဟ်ဃုာ်ဒီးတီၤဖိသဉ်ဘဉ်.)
(1)☐Yes အိဉ် (2)☐No တအိဉ် (999)☐Don't know တသ့ဉ်ညါဘဉ်

11. Is **this child** currently enrolled in: *(Refer to child's health card/lemma)*
မ့၊်ဖိသဉ်အံၤန္ဥ်အခဲအံၤအမံၤအိဉ်ဆဲးလီၤအသးလ၊ – (ကွ၊်လၢဖိသဉ်တ၊်အိဉ်ဆူဉ်အိဉ်ချ့အလဲးမးက့လိ၊်/တ၊်မၤနီဉ်အပူၤ)
(1)☐SFP (2)☐TFP (3)☐Not Enrolled တဆဲးလီၤမံၤဘဉ် (999)☐Don't know တသ့ဉ်ညါဘဉ်/တသ့ဉ်နီဉ်ဘဉ်

11a. **If YES**, how long has **this child** been enrolled in SFP / TFP?
မ့၊်ဆဲးလီၤမံၤတခိ, ဖိသဉ်အဝဲအံၤန္ဥ်အမံၤအိဉ်ဆဲးလီၤအသးလ၊ SFP / TFP?ဆံးယာ်လံလဲဉ်.

(1)☐Less than 2 weeks စ့ၢန္၊် ၂ နံ့ (2) ☐2-6 weeks ၂ – ၆ နံ့
(3)☐More than 6 weeks အါန္၊် ၆ နံ့ (999)☐Don't know တသ့ဉ်ညါဘဉ်

12. Has **this child** ever been enrolled in SFP / TFP? မ့်ဖိသဉ်အံၤန္ဉ်အမံၤအိဉ်ဆဲးလိၤဘဉ်အသးလၢ SFP / TFP တဘျိဘျိဧ.

(1)☐Yes အိဉ် (2)☐No တအိဉ် (999)☐Don't know တသ့ဉ်ညါဘဉ်

12a. **If YES**, reason for exit. မ့်ဆဲးလိၤဘဉ်အမံၤတခိ,/တ်ဂ့်မနုၤလဲဉ်လၢအဘဉ်ဟးထိဉ်ဝဲန္ဉ်လဲဉ်.//

(1)☐Cured/ဘျါက့ၤဝဲ (2)☐Default တမၤလၢမၤပဲၤဝဲဘဉ် (999)☐Don't know တသ့ဉ်ညါဘဉ်

13. Date **this child** last received vitamin A *(Refer to child's health card/lemma*)
မ့်နံၤမ့်သီလၢဖိသဉ်မၤန္ဉ်ဘဉ်ဘံဉ်တဉ်မံဉ်အ့ၤအလိၢ်ခံကတၢ်တဘျိ/(ကွၢ်လၢဖိသဉ်တ်အိဉ်ဆူဉ်အိဉ်ချ့လဲးမးက့လိၤ/ တ်မၤနီဉ်အပူၤ)
Day (dd) မ့်နံၤ_____ Month(mm) လါ_____Year (yyyy) နံဉ်_____ (998)☐No record တ်ကွဲးနီဉ်ကွဲးဃါတအိဉ်

14. Date **this child's** last de-worming (*Refer to child's health card/lemma*)
မ့်နံၤမ့်သီလၢတ်ဟ့ဉ်ဒုးအီကသံဉ်ထိးကလဉ်အကတၢ်တဘျိ/(ကွၢ်လၢဖိသဉ်တ်အိဉ်ဆူဉ်အိဉ်ချ့အခးက့လိၤ/တ်မၤနီဉ်အပူၤ)
Day (dd) မ့်နံၤ_____ Month(mm) လါ _____Year (yyyy) နံဉ်_____ (998)☐No record တ်ကွဲးနီဉ်ကွဲးဃါတအိဉ်

HOUSEHOLD HUNGER SCALE တ်မၤနီဉ်မၤဃါဟံဉ်ဖျဉ်ဃီထၢအတ်သဉ်ဝံၤလီၤဒိအတ်ဂ့်တ်ကျိၤအမး

15. In the past 4 weeks (30 days), was there ever **no food to eat** of any kind in your house because of lack of resources to get food?
လၢအပူၤကွံာ်လွံၢ်နွံ(၃၀သိ)နှဉ်,/မ့်တ်ၢ်အိဉ်တအိဉ်ဘဉ်နီၤတမံၤလၢနကအိဉ်အီၤလၢနဟံဉ်ပူၤခီဖျိလၢတ်ဖိတ်လံၤ
ဒီးတ်ၢ်အိဉ်လၢနဖိအိဉ်တအိဉ်ဘဉ်ၢ်နှဉ်အိဉ်တဘျိဘျိဧ.

(1)☐Yes/အိဉ် (2)☐No တအိဉ် **(If NO, go to no. 16) (မ့်တအိဉ်လဲၤဆူနီၢ်ဂံၢ် 16)** (999)☐Don't know တသ့ဉ်ညါဘဉ်

15a. How often did this happen?/တ်ဒ်အံၤကဲထိဉ်ညီနုၢ်အသးပဲၤဘျိလဲဉ်.

(1) ☐Rarely (1 – 2 times) တညီနုၢ်မၤအသး (၁–၂ဘျိ)
(2) ☐Sometimes (3-10 times)/တဘျိတခိဉ် (၃–၁၀ဘျိ)/
(3) ☐Often (more than 10 times)ကဲထိဉ်သးခဲအံၤခဲအံၤ/(အါန့ၢ်/၁၀ဘျိ)
(999)☐Don't know/တသ့ဉ်ညါဘဉ်

16. In the last 4 weeks (30 days), was there a time when you or any household member went to sleep at night hungry without eating anything at all because there was not enough food?
လၢအပူၤကွံာ်လွံၢ်နွံ(၃၀သိ)နှဉ်,/မ့်နၤဒီးနဟံဉ်ဖိယိဖိဘဉ်မံလၢမုၢ်နၤခီအိဉ်လၢတ်သဉ်ဝံၤသဉ်စ့ၤအပူၤမ့်လၢတ်ၢ်အိဉ်တအိဉ်နီတမံၤလၢက
အိဉ်အီၤ
အဂိၢ်ခီဖျိလၢတ်ၢ်အိဉ်တလၢတလိၢ်ဘဉ်နှဉ်အိဉ်တဘျိဘျိဧ.

(1)☐Yesအိဉ် (2)☐No တအိဉ် **(If NO, go to no. 17) (မ့်တအိဉ်လဲၤဆူနီၢ်ဂံၢ် 17)** (999)☐Don't know တသ့ဉ်ညါဘဉ်

16a. How often did this happen? တ်ဒ်အံၤကဲထိဉ်ညီနုၢ်အသးပဲၤဘျိလဲဉ်.

(1) ☐Rarely (1 – 2 times) တညီနုၢ်မၤအသး (၁–၂/ဘျိ)
(2) ☐Sometimes (3-10 times) /တဘျိတခိဉ် (၃–၁၀ဘျိ)/ /
(3) ☐Often (more than 10 times) ကဲထိဉ်သးခဲအံၤခဲအံၤ/(အါန့ၢ်/၁၀ဘျိ)
(999)☐Don't know/တသ့ဉ်ညါဘဉ်

17. In the last 4 weeks (30 days) was there a time when you or any household member went a whole day and night without eating anything at all because there was not enough food?
လၢအပူၤကွံာ်လွံၢ်နွံ(၃၀သိ)နှဉ်,/မ့်နၤဒီးနဟံဉ်ဖိယိဖိတအိဉ်ဘဉ်တ်ၢ်အိဉ်နီတမံၤလၢမုၢ်ဆါခိမ့်ဂ့ၤဒီးလၢမုၢ်နၤခိမ့်ဂ့ၤခီဖျိလၢတ်ၢ်အိဉ်တအိဉ်
လၢကအိဉ်ဒီးတ်ၢ်အိဉ်တလၢတလိဉ်ဘဉ်နှဉ်အိဉ်တဘျိဘျိဧ.

(1)☐Yes အိဉ် (2)☐No တအိဉ် **(If NO, go to no. 18) (မ့်တအိဉ်လဲၤဆူနီၢ်ဂံၢ် 18)** (999)☐Don't know /တသ့ဉ်ညါဘဉ်

17a. How often did this happen?/တ၊်ဒ်အံ၊်ကဲထိဉ်ညီနု၊်အသးပဲ၃၊်ဘျိလဲဉ်.

(1) ☐Rarely (1 – 2 times) တညီနု၊်မ၊်အသး (၁–၂/ဘျိ)

(2) ☐Sometimes (3-10 times) /တဘျိတခီဉ် (၃–၁၀ဘျိ)/ /

(3) ☐Often (more than 10 times) ကဲထိဉ်သးခဲအံ၊်ခဲအံ၊်/(အါန့၊်/၁၀ဘျိ)

(999)☐Don't know တသ့ဉ်ညါဘဉ်

FOOD CONSUMPTION SCORE (FCS-N) တ၊်အီဉ်တ၊်အီတ၊်မ၊်နီဉ်အနီဉ်စ၊်နီ၊်ဒူး

18. During the **past week**, how many days have each of these types of foods been eaten **in your household**?
လ၊အပူ၊ကွံာ်တန်ဲ(ဂ့သီ)နဟံဉ်ဖိယီဖိအကျါတ၊်အီဉ်တ၊်အီလ၊လာ်တဖဉ်တ၊်အီဉ်တ၊်အီမိ၊်ပှ၊်မ့၊်ဂ့၊်လ၊အီဉ်ဆိဉ်သးမ့၊်ဂ့၊်အီဉ်ဘဉ်ပှဲ၃သီလဲဉ်နှဉ် ဝံသးစူ၊တဲဘဉ်ပှ၊်တကွ၊်

Food item တ၊်အီဉ်အကလုာ်တဖဉ်	**# days eaten in past 7 days** နီ၊်ဂံ၊်(နံ၊သီ) အီဉ်ဘဉ်တ၊်လ ၊ပူ၊ကွံာ်ဂ့သီ
18.1 Rice & other grains: Including rice, noodles, wheat, bread, corn ဟုသးဒီးဘုအဂုၤအဂၤတဖဉ် လ၊အမ့၊် ဟုသး,ခီးစွဲ,ဘုကူဉ်,ကိဉ်,ဘုခွ	
18.2 Tubers: Including yams, potatoes, white flesh sweet potatoes, taro တ၊်တံ၊်တဖဉ်လ၊အမ့၊်နွဲဉ်တံ၊်အ၊လူတံ၊်ခုဉ်တံ၊်ဟူဉ်ကလ၊်ဝါတံ၊်ဘီးကွ၊်တံ၊်နွဲ၊်သ့ဉ်တံ၊်ဒီးတ၊်တံ၊်အဂၤတဖဉ်	
18.3 Pulses: Including any types of beans, lentils, peas, nuts, soy, soy milk, tofu ပထိးချံကလုာ်ကလုာ်လ၊အမ့၊်ပဲမ့တမ့၊်ဘီဘဉ်ချံမ့တမ့၊်ပဲနု၊်ထံပဲအကလုာ်ကလုာ်လ၊အကုကိ၊	
18.4 Milk & Dairy: Including any fresh or powdered milk, yoghurt (Excluding tinned sweetened condensed milk) တ၊်နု၊်ထ ံကမူဉ်ကျိ၊်နု၊်ထံလ၊အမ့၊်ကျိ၊်နု၊်ထံတ၊်နု၊်ထံလီ၊သက၊(တမ့၊်တ၊်နု၊်ထံဒ၊အဆ၊(နိ ့ ဆီ)ဘဉ်	
18.5 Flesh Meat: တ၊်ဖံးတ၊်ညဉ် Including fresh/tinned beef, pork, goat, chicken, duck, birds, insects, frogs, wild animals ကျိ၊်ညဉ်ဒ၊,ထီးညဉ်,မဲးတဲးလဲးညဉ်,ဆီညဉ်,ထိဉ်ဒ့ဉ်ညဉ်,ထိဉ်ညဉ်တ၊်ဖိလံ၊ဖိဃ၊်ဒ့ဉ်ညဉ်တ၊်မံ၊လာ်ညဉ်	
18.6 Fish/Shellfish:ညဉ်,ချိဉ် Including fresh, dried, salted, tinned fish or shellfish ညဉ်ဃ့,ညဉ်ဒ၊, ချိဉ်,သဒီဉ်,ဆွဲဉ်	
18.7 Organ Meat: Including liver, kidney, heart or any other organ meat တ၊်သူဉ်တ၊်သးဒွဲပူ၊တ၊်ညဉ် လ၊အမ့၊်တ၊်သူဉ်တ၊်ကလ့၊်တ၊်သးတ၊်ကထိဒီးတ၊်အိဉ်လ၊ဒွဲပူ၊တဖဉ်	
18.8 Any Eggs တ၊်ဒံဉ်အကလုာ်ကလုာ်	
18.9 Any Vegetables or Leaves တ၊်ဒီးတ၊်လဉ်အကလုာ်ကလုာ်	
18.10 Yellow Orange Vegetables: ဘိ,ဂိ၊ဘိ,တ၊်ဒီးတ၊်လဉ်တဖဉ် Including pumpkin, carrots, capsicum (red peppers), orange sweet potatoes တဘဉ်ဂိ၊တံ၊်,မိ၊်ဟဲသဉ်အလွဲ၊်ဂိ၊,လူ၊်ခ့ဘိ,ဟူဉ်ကလ၊်တံ၊်နွဲ၊်သိဖိတံ၊်ဂိ၊ဒီးအဂုာ်အဂၤတဖဉ်	
18.11 Dark Green Leafy Vegetables: တ၊်ဒီးတ၊်လဉ်လ၊အလွဲ၊်လါ Including kale, pumpkin leaf, other dark green leaves လ၊အမ့၊်ကစိဒီး,သဘဉ်လါဟ့,လူ၊်ခ့ဒီး,တ၊်ဒီးတ၊်လဉ်လါဟ့တဖဉ်	
18.12 Any Fruits တ၊်သူတ၊်သဉ်တဖဉ်	
18.13 Yellow Orange Fruits: ဘိ,ဂိ၊ဘိ,တ၊်သူတ၊်သဉ်တဖဉ် Including mango, papaya & similar (excluding oranges & bananas) လ၊အမ့၊်တခီးသဉ်တကွံသ့ဉ်သဉ်ဒီးတ၊်သူတ၊်သဉ်လ၊အလီ၊စ်လိာ်သးတဖဉ်(တဃ့ဉ်သဉ်ဒီး တကွံသဉ်တပဉ်ဘဉ်)	

Food item တ၊်အိဉ်အကလုာ်တဖဉ်	**# days eaten in past 7 days** နိ၊်ဂံ၊်(နံးသီ) အိဉ်ဘဉ်တ၊်လ ၊ပူးကွံဉ်ဂွသီ
18.14 Oils & Fats: Cooking oils, margarine/butter, meat fat သိအိဉ်,တ၊်အသိတဖဉ် သိအိဉ်,တ၊်ဖံးတ၊်ညဉ်သိ,မါကရံ,ထိဘးသိ	
18.15 Sugar: တ၊်အဆ၊ Including sugar, honey, jam, cakes, sugary drinks/snacks, tinned sweetened condensed milk, 3-in-1 coffee, Milo/Ovaltine လ၊အမ့၊်အံသဉ်ဆ၊,ကနဲစီ,တ၊သဉ်ဃုဉ်ဆ၊,ကိဉ်ဆ၊,တ၊်ဆ၊ထံ,တ၊်နု၊်ထံဒ၊ဆ၊	
18.16 Asia*RE*Mix (အ့ၫဉ်ရံဉ်မံး)	
18.17 BabyBRIGHT (ဘ့ဘံဉ်ဘရဲး)	
18.18 Condiments/Spices:တ၊်နာမူနာ၊ဆီတ၊်မ၊အိဉ်ထိဉ်တ၊်အိဉ်အရီ၊်တဖဉ် Salt, chilli, tea, Rodi, Ajinomoto MSG, fish/shrimp paste အံသဉ်,မိ၊်ဟဲသဉ်,တ၊်ဖိဆ၊ကမူဉ်,သဒိဉ်အုဉ်,ညဉ်အုဉ်	

FEEDING PRACTICES - MATERNAL/တ၊်မ၊ညီနု၊်သးလ၊တ၊်ဒုးအိဉ်ဖိသဉ်တ၊်အိဉ်(လ၊အဘဉ်ထွဲဒီးမိ၊်)

19. How old is your **youngest child**? နဖိအဆံးကတ၊်၊်အသးအိဉ်

_____ (Months) လါ or_____ (Years) နံဉ် (999) ☐Don't know တသ့ဉ်ညါဘဉ်

20. After the delivery of your **youngest child**, did you restrict the kinds of foods you ate?
ဖဲလ၊နအိဉ်ဖျဉ်နဖိအဆံးကတ၊်၊်တစ၊ဝံ၊အလိ၊်ခံန္ဉ်နဟးဆဲး(ဒုဉ်အီဉ်)တ၊်အိဉ်အိဉ်တမံ၊မံ၊စ၊ါ.

(1)☐Yesအိဉ် (2)☐No တအိဉ် (999)☐Don't know တသ့ဉ်ညါဘဉ်

20a. If YES, which foods did you restrict? မ့၊်အိဉ်နှဉ်, တ၊်အိဉ်မနု၊လ၊နပလိ၊်ဟးဆဲး (ဒုဉ်အီဉ်)အီ၊နှဉ်လဲဉ်.

_____

21. Are you still currently breastfeeding?မ့၊်နဟ့ဉ်ဒုးအီနဖိလ၊နနု၊်ထံဒံး၏

(1)☐Yes/အိဉ် (2)☐No တအိဉ် (999) ☐Don't know တသ့ဉ်ညါဘဉ်

(If YES, go to no. 23.) (မ့၊်ဒုးအီန္ဉ်လဲ၊ဆူနိဉ်ဂံ၊် ၂၃)

22. How old was your youngest child when you stopped breastfeeding him/her?
နဖိအဆံးကတ၊်၊်တဂ၊အိဉ်ပဲ့၊နံဉ်မးနဖွးအီ၊လ၊နနု၊်ထံလဲဉ်

_____ (Months) လါ or_____ (Years) နံဉ် (999) ☐Don't know တသ့ဉ်ညါဘဉ်

23a. Did you go to the Antenatal Clinic (ANC) as soon as you were pregnant with your youngest child?
ဖဲလ၊နသ့ဉ်ညါလီ၊နသးလ၊နဒ၊ထိဉ်နဖိအဆံးကတ၊်၊်တဂ၊တဘျိဃီလံန္ဉ်မ့၊်နလဲ၊ဘဉ်ဆူတ၊်ဆါဟံဉ်၏

(1)☐Yes/လဲ၊ဘဉ် (2)☐No တလဲ၊ဘဉ် ဘဉ် (999) ☐Don't know တသ့ဉ်ညါဘဉ်

23b. How many months gestation were you when you first visited Antenatal clinic (ANC) when you were pregnant with your youngest child? နဒ၊နဖိအဆံးကတ၊်၊်တစ၊အခါနလဲ၊ဆူတ၊်ဆါဟံဉ်(ANC)
အခိဉ်ထံးကတ၊်၊်တဘျိန္ဉ်,/နဖိန္၊်ပဲ့၊ါလါလံလဲဉ် (*Take information from Pink Book if available*.)
မိ၊်ဒ၊လဲးမး(လံာ်ပါယီ၊်)မ့၊်အိဉ်နှဉ်ဟံးန္၊်တ၊်ဂ့၊်လ၊လံာ်အဝဲန္ဉ်အပူ၊)

(1)☐1-3 months ဖဲလ၊အိဉ် ၁လါ–၃လါ (4) ☐Did not attend ANC when pregnant with youngest child

(2)☐4-7 monthsဖဲလ၊အိဉ် ၄လါ–၇လါ မိ၊်တလဲ၊ဆူတ၊်ဆါဟံဉ်ဖဲအဒ၊အဖိဆံးကတ၊်၊်တဂ၊အခါဘဉ်

(3)☐≥8 months ဖဲလ၊အိဉ် ၈လါဆူအဖိခိဉ် (999)☐Don't know/တသ့ဉ်ညါဘဉ်

24. Did you take any of the following supplements when you were pregnant or breastfeeding **your youngest child**? မ့ၢ်နဟံးန့ၢ်တၢ်အိဉ်ဂံၢ်ဘါလၢတၢ်ဖိလာ်တဖဉ်ဖဲလၢနဒၢထိဉ်လၢခံကတၢ်၊ မ့တမ့ၢ် ဒုးအိဖနု၊်ထံလၢခံကတၢ်၊်နှဉ်၈၊.

24a. Iron supplement ကသံဉ်ဂံၢ်ဘါအါယၢဉ် (1)☐Yes အီ (2)☐No တအီ (999)☐Don't know တသ့ဉ်ညါဘဉ်

24b. Vitamin A supplement ကသံဉ်ဂံၢ်ဘါဘံဉ်တၢ်မံဉ် (1)☐Yes အီ (2)☐No တအီ (999)☐Don't know တသ့ဉ်ညါဘဉ်

24c. Folic acid supplement ကသံဉ်ဂံၢ်ဖိလ့ဉ်ဆဲဉ်စုး (1)☐Yes အီ (2)☐No တအီ (999)☐Don't know တသ့ဉ်ညါဘဉ်

24d.☐Other အဂုၤအဂၤ (*specify*) ဟ်ဖျါလိၤတံၢ်လိၤဆဲး _____

25. What are benefits of weight gain during pregnancy? (*Participant can answer more than 1 choice*.)
ပှၤမိၢ်ဒၢဖဲဒၢအဆၢကတိၢ်အကံလိ(အါထိဉ်)ကဲဘျူးကဲဖှိဉ်ဒ်လဲဉ်. (ပှၤစံးဆၢတၢ်ဖိဟ့ဉ်တၢ်စံးဆၢအါန့ၢ်တခါသ့ဝဲ.)

(1)☐Prevent risk of maternal complications and death
ဒိသဒၢဝဲတၢ်လိၤဘဉ်ယိဉ်ဖဲမိၢ်ဒၢအဆၢကတိၢ်တၢ်ဂ့ၢ်လၢအဒုးအိဉ်ထိဉ်တၢ်ကိတၢ်ခဲတဖဉ်ဒီးတၢ်သံတၢ်ပှၤ်အဂိၢ်

(2)☐Prevent anemia in pregnancy ဒိသဒၢဝဲသွံဉ်ဂံၢ်စၢ်ဘါစၢ်တၢ်ဆါဖဲဒၢအဆၢကတိၢ်.

(3)☐Prevent low birth weight and premature baby ဒိသဒၢဝဲဖိသဉ်အိဉ်ဖျဉ်အကံလိတ့ဲၤဒီးတၢ်အိဉ်ဖျဉ်ဆိလၢဆၢကတိၢ်တဘဉ်.

(4)☐Prevent infection for baby and mother ဒိသဒၢဝဲတၢ်ဘဉ်ကူဘဉ်က်တၢ်ဆါလၢဖိသဉ်ဒီးမိၢ်အဂိၢ်

(5)☐ Promote child growth and development in early childhood
မၤဂ့ၤထိဉ်ဖိသဉ်အတၢ်ဒိဉ်ထိဉ်ဒီးတၢ်ဒိဉ်ထိဉ်ထိထိဉ်ဖဲလၢဖိသဉ်ဆံးအကတိၢ်

(6)☐Other အဂုၤအဂၤ
(*specify)*/(ဟ်ဖျါထိဉ်လိၤတံၢ်လိၤဆဲး)_____
(999)☐Don't know တသ့ဉ်ညါဘဉ်

26. When you were pregnant with your **youngest child**, how did you eat in comparison to when you were not pregnant? (*Ask mother to select one answer for each of the following questions.) For questions 26b and 26c, use food photos to show examples of protein and iron-rich foods.)*
ဖဲလၢနဒၢနဖိအဆံးကတၢ်၊်တစၤန့ဉ်, နအိဉ်တၢ်ဒ်လဲဉ်နမ့ၢ်ထိဉ်သတြိၤအီၤဒီးနတဒၢဘဉ်အခါနအိဉ်တၢ်,
တၢ်အိဉ်လၢအဂ့ၤန့ၢ်ဂံၢ်နှ၊်ဘါလၢနကစၢ်အဂိၢ်ဒီးနဖိအဂိၢ်. *(မၤမိၢ်ယုထၢတၢ်သံကွၢ်လၢတၢ်ဖိလာ်အတၢ်စံးဆၢထဲတဖျၢဉ်ဓိၤစုဉ်စုဉ်) လၢတၢ်သံကွၢ်နီဉ်ဂံၢ် 26b* ဒိး *26c, သူတၢ်အိဉ်ကရူ၊်တၢ်ဂီၤအဒိတဖဉ်ဒ်အမ့ၢ်နီၢ်ခိဒိဉ်ထိဉ်ဒီး* အါယၢဉ်နဉ်–ရံးခွဲ(လၢအဒိသဒၢတၢ်) တၢ်အိဉ်အတၢ်ဂီၤတဖဉ်တက့ၢ်

26a. Ate **အိဉ်** (1) ☐More food အိဉ်အါထိဉ်တၢ်အိဉ်
(2) ☐Less food အိဉ်စ့ၤလိၤတၢ်အိဉ်
(3) ☐Same amount of food အိဉ်ဒ်ညီနု၊်အိဉ်ဒ်လိၤလိၢ်
(999)☐Don't know/တသ့ဉ်ညါဘဉ်

26b. Ate **အိဉ်** (1) ☐More protein-rich (body building) foods
အိဉ်အါထိဉ် တၢ်ဖံးတၢ်ညဉ်(နိၢ်ခိဒိဉ်ထိဉ်ကရူ၊်)အတၢ်အိဉ်တဖဉ်
(2) ☐Less protein-rich (body building) foods
အိဉ်စ့ၤလိၤတၢ်ဖံးတၢ်ညဉ်(နိၢ်ခိဒိဉ်ထိဉ်ကရူ၊်)အတၢ်အိဉ်တဖဉ်
(3) ☐Same amount of protein-rich (body building) foods
အိဉ် တၢ်ဖံးတၢ်ညဉ်(နိၢ်ခိဒိဉ်ထိဉ်ကရူ၊်)အတၢ်အိဉ်အိဉ်ဒ်ညီနု၊်အိဉ်ဒ်လိၤလိၢ်
(999)☐Don't know/တသ့ဉ်ညါဘဉ်

26c. Ate **အိဉ်** (1) ☐More iron-rich (protective) foods
အိဉ်အါထိဉ်အါယၢဉ်နဉ်–ရံးခွဲ(လၢအဒိသဒၢတၢ်)အတၢ်အိဉ်တဖဉ်
(2) ☐Less iron-rich (protective) foods
အိဉ်စ့ၤလိၤအါယၢဉ်နဉ်–ရံးခွဲ(လၢအဒိသဒၢတၢ်)အတၢ်အိဉ်တဖဉ်
(3) ☐Same amount of iron-rich (protective) foods
အိဉ်အါယၢဉ်နဉ်–ရံးခွဲ(လၢအဒိသဒၢတၢ်)အတၢ်အိဉ်ထဲသိးသိးတဖဉ်
(999)☐Don't know/တသ့ဉ်ညါဘဉ်

27. When you were breastfeeding **your youngest child**, how did you eat in comparison to when you were not breastfeeding and not pregnant? (*Ask mother to select one answer for each of the following questions.) For questions 27b and 27c, use food photos to show examples of protein and iron-rich foods.)*
ဖဲလၢနဒုးအိနုၢ်နဖိအဆံးကတၢ်တစၢးအခါန့ဉ်, နအိဉ်တၢ်ဒ်လဲဉ်ဖဲနမ့ၢ်ထိဉ်သ တြိၤအိၤဒီးနတဒုးအိဉ်နုၢ်ဖိအခါ,ဒီးနတဒၢအခါ
*(မၢမိၢ်ဃုတၢ်သံကွၢ်လၢတၢ်ဖိလာ်တဖျၢဉ်စုဉ်စုဉ်ဒီးစံးဆၢထဲတဖျၢဉ်စိၤ) လၢတၢ်သံကွၢ်နိဉ် ဂ်ၢ် **27b** ဒီး **27c,***
သူတၢ်အိဉ်ကရူၢ်တၢ်ဂီၤအဒိတဖဉ်ဒ်အမ့ၢ်နိၢ်ခိဒိဉ်ထိဉ်ဒီး အါယၢဉ်နဉ်–ရံးခွဲ(လၢအဒိသဒၢတၢ်) တၢ်အိဉ်အတၢ်ဂီၤတဖဉ်တက့ၢ်

27a. Ate **အိဉ်** (1) ☐More food အိဉ်အါထိဉ်တၢ်အိဉ်
(2) ☐Less food အိဉ်စ့ၢလီၤတၢ်အိဉ်
(3) ☐Same amount of food အိဉ်ဒ်ညီနုၢ်အိဉ်ဒ်လီၤလီၤ
(999)☐Don't know တသ့ဉ်ညါဘဉ်

27b. Ate **အိဉ်** (1) ☐More protein-rich (body building) foods
အိဉ်အါထိဉ် တၢ်ဖံးတၢ်ညဉ်(နိၢ်ခိဒိဉ်ထိဉ်ကရူၢ်)တၢ်အိဉ်တဖဉ်
(2) ☐Less protein-rich (body building) foods
အိဉ်စ့ၢလီၤ တၢ်ဖံးတၢ်ညဉ်(နိၢ်ခိဒိဉ်ထိဉ်ကရူၢ်)တၢ်အိဉ်တဖဉ်
(3) ☐Same amount of protein-rich (body building) foods
အိဉ် တၢ်ဖံးတၢ်ညဉ်(နိၢ်ခိဒိဉ်ထိဉ်ကရူၢ်)အတၢ်အိဉ်အိဉ်ဒ်ညီနုၢ်အိဉ်ဒ်လီၤလီၤ
(999)☐Don't know/တသ့ဉ်ညါဘဉ်

27c. Ate **အိဉ်** (1) ☐More iron-rich (protective) foods
အိဉ်အါထိဉ်အါယၢဉ်နဉ်–ရံးခွဲ(လၢအဒိသဒၢတၢ်)အတၢ်အိဉ်တဖဉ်
(2) ☐Less iron-rich (protective) foods
အိဉ်စ့ၢလီၤအါယၢဉ်နဉ်–ရံးခွဲ(လၢအဒိသဒၢတၢ်)အတၢ်အိဉ်တဖဉ်
(3) ☐Same amount of iron-rich (protective) foods
အိဉ်အါယၢဉ်နဉ်–ရံးခွဲ(လၢအဒိသဒၢတၢ်)အတၢ်အိဉ်ထဲသိးသိးတဖဉ်
(999)☐Don't know/တသ့ဉ်ညါဘဉ်

FEEDING PRACTICES – BREASTFEEDING တၢ်မၤညီနုၢ်သးလၢတၢ်ဒုးအိဉ်ဖိသဉ်တၢ်အိဉ် (ဖဲဒုးအိမိၢ်နုၢ်ထံအဆၢကတိၢ်)

28. For your **youngest child**, how long after birth did you put the newborn to the breast?
ဖဲနအိဉ်ဖျဉ်နဖိအဆံးကတၢ်တစၢဝံၤအလိၢ်ခပဲၤနၢ်ဂုဉ်မး နဒုးအိဉ်အီၤလၢနနုၢ်ထံလဲဉ်.
(1) ☐Immediately or within one hour after birth. အိဉ်ဖျဉ်ဝံၤတဘျိယိ မ့တမ့ၢ် အိဉ်ဖျဉ်ဝံၤလၢတနဉ်ရံဉ်အတိၢ်ပူၤ
(2) ☐Within 24 hours (not < 1 hr) လၢ၂၄နဉ်ရံဉ်အပူၤ (တစ့ၤန့ၢ်ဘဉ်တနဉ်ရံဉ်)
(3) ☐Never breastfed တဒုးအိနုၢ်ထံနိတဘျိ
(4) ☐Other အဂုၤအဂၤ (*specify*) ဟ်ဖျါလီၤတံၢ်လီၤဆဲး_____
(999)☐Don't know/တသ့ဉ်ညါဘဉ်

29. Has **this child** ever been breastfed? မ့ၢ်ဖိသဉ်တဂၤအံၤန္ဉ်တၢ်ဟ့ဉ်ဒုးအိအီၤမိၢ်နုၢ်ထံတဘျိဘျိဧါ.
(1) ☐Yes ဟ့ဉ်ဒုးအိ (2)☐Noတဟ့ဉ်ဒုးအိ **(If NO, go to no. 31.)** (မ့ၢ်တဟ့ဉ်ဒုးအိန္ဉ်လဲၤဆူနိဉ်ဂ်ၢ်**31**)
(999)☐Don't know တသ့ဉ်ညါဘဉ်

30. Is **this child** currently breastfeeding?/အခဲအံၤန္ဉ်ဖိသဉ်အဝဲအံၤမ့ၢ်တၢ်ဟ့ဉ်ဒုးအိအီၤမိၢ်နုၢ်ထံဒံးဧါ.
(1)☐Yes/ဟ့ဉ် (2)☐No တဟ့ဉ် (999)☐Don't know တသ့ဉ်ညါဘဉ်

30a. For how many months has **this child** been breastfeeding?/
ဖိသဉ်အဝဲအံၤန္ဉ်ဘဉ်တၢ်ဟ့ဉ်ဒုးအိအီၤမိၢ်နုၢ်ထံပဲၤလါလံလဲဉ်._____monthsလါ (999)☐Don't know တသ့ဉ်ညါဘဉ်

31. How many months old was this child when you started giving water?

ဖိသည်အံၤတၢ်စးထိဉ်ဟ့ဉ်ဒုးအိအီၤလၢထံၤန့ဉ်,/ဖဲအိဉ်ဝဲပှၤလါလဲဉ်._____months လါ (999) ☐Don't know တသ့ဉ်ညါဘဉ်

32. What are benefits of exclusive breastfeeding? (*No water or any other foods or liquids*.)
တၢ်ဟ့ဉ်ဒုးအိမိၢ်နုၢ်ထံန့ဉ်အတၢ်ကဲဘျူးကဲဖြိဉ်မ့ၢ်မနုၤတဖဉ်လဲဉ်./(တပဉ်ဃုာ်ထံမ့တမ့ၢ်တၢ်အိဉ်အဂုၤဂၤမ့တမ့ၢ်တၢ်ထံတၢ်နိအဂုၤဂၤတဖဉ်)
(Do not read answer; participant can select more than 1 choice.)
(ဝံသးစူၤဖးထိဉ်တၢ်စံးဆၢတဂ့ၤ,/ပှၤစံးဆၢတၢ်ဖိဟ့ဉ်တၢ်စံးဆၢအါန့ၢ်တခါသ့ဝဲ)

(1)☐ Sufficient nutrients for baby တၢ်အိဉ်နှၢ်ဂံၢ်နှၢ်ဘါလၢလၢပှဲၤပှဲၤဝဲလၢဖိသဉ်အဂိၢ်.

(2)☐Protects baby from infections ဒီသဒၢဝဲဖိသဉ်လၢတၢ်ဆါဘဉ်ကူဘဉ်ဂ်ာ်တဖဉ်.

(3)☐Promotes optimum growth & development
မၤဂ့ၤထိဉ်အတၢ်ဒိဉ်ထိဉ်ဒီးတၢ်ဒိဉ်ထိဉ်ထိထိဉ်လၢအဂ့ၤကတၢ်ကြၢးကတၢ်ၢ်ဒ်တၢ်ဟ်ပနိဉ်အသိး

(4)☐Reduce risk of post-partum bleeding မၤစ့ၤလိၤတၢ်လိၤဘဉ်ယိဉ်လၢသွံဉ်ယွၤလိၤသွံဉ်ဃိၢ်ဝဲဖဲလၢအိဉ်ဖျဉ်ဝံၤလိၢ်ခံ

(5)☐Promotes bonding & motherhood
မၤဂ့ၤထိဉ်ဒီးဒုးအိဉ်ထိဉ်တၢ်ရှလိာ်မှာ်လိာ်ဘူးဘူးတၢ်တံၢ်လၢမိၢ်ဒီးဖိအဘၢဉ်စၢၤဒီးတၢ်ဘဉ်ထွဲ

(6)☐Decreases breast, ovarian & cervical cancers မၤစ့ၤလိၤနုၢ်ခဲန်စၢဉ်တၢ်ဆါ,/ပိာ်မုဉ်ဒၤလိၢ်ခိဉ်ထိးခဲန်စၢဉ်

(7)☐Delays new pregnancy မၤစဲၤခံဝဲတၢ်ဒၤထိဉ်ကဒီးအသိတဒၤ

(8)☐Weight loss for mother မိၢ်ကံလိလိၤစ့ၤ

(9)Others (*explain*) အဂုၤအဂၤတဖဉ်(ဟ်ဖျါထိဉ်လိၤတံၢ်လိၤဆဲး) _____
_____

(999)☐Don't know တသ့ဉ်ညါဘဉ်

FEEDING PRACTICES – COMPLEMENTARY FEEDING/တၢ်မၤညီနုၢ်သးလၢတၢ်ဒုးအိဉ်ဖိသဉ်တၢ်အိဉ်

33. How old was **this child** when you gave the first meal? (*Meal is solid food, or semi-solid food and soft food*.)
ဖိသဉ်အံၤဖဲလၢနဒုးအိဉ်အိၤတၢ်အိဉ်အခိဉ်ထံးကတၢ်တဘျိန့ဉ်အသးအိဉ်ပှဲၤနံဉ်လဲဉ်./
(တၢ်အိဉ်လၢအအိဉ်ဒီးအသံးအကာ်/မ့တမ့ၢ်/တၢ်အိဉ်ဟ်ဃုာ်ဒီးအသံးအကာ်တစဲးတမ့ဲးဒီးတၢ်အိဉ်လၢအကဟ်လ့ာ်)

(1)☐Less than 2 weeks စ့ၤန့ၢ်ခံန်ံ (5) ☐At 6 months ဖဲယုလါ

(2)☐2 weeks-less than 1 month ခံန်ံ/–/စ့ၤန့ၢ်တလါ (6) ☐7 months & above ဂ့လါဒီးဆူဖိခိဉ်

(3)☐1 month-less than 4 months တလါ/–/စ့ၤန့ၢ်လွံၢ်လါ (7) ☐Has not yet given/တဟ့ဉ်ဒုးအိဉ်ဒံးဘဉ်

(4)☐4 months-less than 6 monthsလွံၢ်လါ/–/စ့ၤန့ၢ်ဃုလါ (999)☐Don't know တသ့ဉ်ညါဘဉ်

34. How many meals did **this child** eat during last 24 hours? (*Meals refer to staple food, not small snacks.*)
မဟါတနံၤအတိၢ်ပူၤန့ဉ်,/ဖိသဉ်အံၤအိဉ်တၢ်အိဉ်ပှဲၤဘျိလဲဉ်./(တၢ်အိဉ်တဖဉ်မ့ၢ်ဝဲတၢ်အိဉ်မိၢ်ပှၢ် မ့ၤ,တမ့ၢ်တၢ်အိဉ်ကိဉ်ကစီးကစဲးဖိတဖဉ်)

Number of mealsအိဉ်တၢ်အိဉ်အဘျိတဖဉ်_____ (999)☐Don't know တသ့ဉ်ညါဘဉ်

35. How many times did **this child** eat a snack during last 24 hours? (*Kanom, AsiaRE*Mix *snacks, fruit, other*)
မဟါတနံၤအတိ ၢ်ပူၤန့ဉ်,/ဖိသဉ်အံၤအိဉ်ကိဉ်အိဉ်တၢ်အိဉ်ကစဲးကစီး/တၢ်အိဉ်လၢတကျၢၤသးတတံၤသးတဖဉ်ပှဲၤဘျိလဲဉ်.
(ကိဉ်,/ကိဉ်အ့ဂျဉ်ရံးမံးစ်,/တၤသူတၤသဉ်, အဂုၤအဂၤတဖဉ်)

Number of times_____ အိဉ်ကိဉ်အိဉ်တၢ်အိဉ်ကစဲးကစီးအဘျိတဖဉ် (999)☐Don't knowတသ့ဉ်ညါဘဉ်

36. During the **past week** did **this child** eat any Asia*RE*Mix?
အပူၤကွံာ်မဟါတန်ံအတိၢ်ပူၤန့ဉ်,/မ့ၢ်ဖိသဉ်အံၤအိဉ်ဘဉ်အ့ဂျၢဉ်ရံးမံးစ် (Asia*RE*Mix)ဓါ.

(1)☐Yes/အိဉ်ဘဉ် (2)☐No တအိဉ်ဘဉ် (999)☐Don't know တသ့ဉ်ညါဘဉ်

36a.If YES, how many days did the child eat Asia*RE*Mix?
ၥဖိက./မ့ၢ်အိဉ်ဘဉ်ဝဲတခိ,/ဖိသဉ်အံၤအိဉ်ဝဲအ့ဂျဉ်ရံးမံးစ် (Asia*RE*Mix) ပှဲၤသီလဲဉ်.

_____ days သိ (999)☐Don't know တသ့ဉ်ညါဘဉ်

36b. **If NO**, why not? မ့်တအိုဉ်ဘဉ်ဝဲတခီ,/ဘဉ်မနုၤအယိလဲဉ်.

(1) ☐Cannot cook itဖိအိဉ်တဘဉ်ဘဉ်.

(2) ☐Run out of Asia*RE*MIX/အ့ဂျၢဉ်ရုံးမံးစ် (Asia*RE*Mix) လၢာ်ဝဲ.

(3) ☐Child does not like it ဖိသဉ်အိဉ်တဝံဉ်ဘဉ်.

(4) ☐Not enough oil to cook/သိတအိဉ်ဝဲလၢလၢလိၢ်လိၢ်လၢကဖိအိဉ်ဝဲအဂိၢ်

(5) ☐Don't receive Asia*RE*MIX because use Food Card System
တဒိးန့်ဘဉ်အ့ဂျၢဉ်ရုံးမံးစ် (Asia*RE*MIX) ဘဉ်. မ့်လၢသူတၢ်အိဉ်ကး

(6) ☐Other အဂုၤအဂၤ_____

(999)☐Don't know/တသ့ဉ်ညါဘဉ်

37. What are benefits of eating Asia*RE*Mix? *(Do not read answer; participant can give > 1 answer.)*
တၢ်အိဉ်အ့ဂျၢဉ်ရုံးမံးစ်နှဉ်အဘျုးအဖိဉ်မ့်မနုၤလဲဉ်. (ဝံသးစူၤဖးထိဉ်တၢ်စံးဆၢတဂ့ၤ,/ပှၤစံးဆၢတၢ်ဖိဟ့ဉ်တၢ်စံးဆၢအါန့်တဖျၢဉ်သ့ဝဲ)

(1) ☐ Sufficient nutrients for baby တၢ်အိဉ်နှ်ဂံၢ်နှ်ဘါလၢလၢပဲၤပဲၤလၢဖိသဉ်အဂိၢ်

(2) ☐Protects baby from infections ဒိသဒၢဖိသဉ်လၢတၢ်ဘဉ်ကူဘဉ်ဂ်ာတၢ်ဆါတဖဉ်

(3) ☐Promotes optimum growth and development
မၤဂ့ၤထိဉ်အတၢ်ဒိဉ်ထိဉ်ဒီးတၢ်ဒိဉ်ထိဉ်ထိထိဉ်လၢအဂ့ၤအကြၢးကတၢ်ါဒ်တၢ်ဟ်ပနီဉ်အသိး

(4)Others (*explain*)အဂုၤအဂၤတဖဉ် (ဟ်ဖျါလီၤတံၢ်လီၤဆဲး) _____

_____

(999)☐Don't know တသ့ဉ်ညါဘဉ်

CLINICAL EXAM/တၢ်မၤကွၢ်တၢ်ဆူးတၢ်ဆါအတၢ်သံကွၢ်

38. Within this month, has **this child** been ill?လၢတလါအံၤအတိၢ်ပူၤန့ဉ်,/ဖိသဉ်အံၤဆိးက့တဘျိဘျိဓါ.

(1)☐Yes/ဆိးက့ (2)☐No တဆိးက့ (999)☐Don't know တသ့ဉ်ညါဘဉ်

38a.**If YES**, was the illness serious? (e.g., malaria, acute diarrhea, pneumonia, had to go to clinic…)
မ့်ဆိးက့နှဉ်,/မ့်ါအဆိးက့နးနးဓါ.
(အဒိ,/တၢ်ညဉ်ဂိၢ်,/တၢ်ဟၣ်ဖၣလူသတူၢ်ကလာ်,/ပသိဉ်တၢ်ခုဉ်ဘဉ်,/ဘဉ်လဲၤဆူတၢ်ဟ့ဉ် ကသံဉ်ဒၢးလီၤ……)

(1)☐Yes/ဆိးက့နး (2)☐No တဆိးက့နး (999)☐Don't know တသ့ဉ်ညါဘဉ်

39. Angular Stomatitis (*Both sides*) ထးခိဉ်နၢဉ်ထံး/ပူၤလိၢ်ထိဉ်(ခံကပၤလၢာ်)(1)☐Yes အိဉ် (2)☐No တအိဉ်

WEIGHT, HEIGHT & MUAC တယၢ်ဃၢဒိးအနိၢ်ထိဒိးတၢ်ထိဉ်စုဒုဉ်

40. Weight of child ဖိသဉ်အတယၢ်ဃၢ _____kg ကံလိ

(1)☐ Used floor scale ထိဉ်ကွၢ်စီၤကွၢ်လၢပှၤသးပှၤ်ကံလိ (998)☐Unable to measure ထိဉ်ကွၢ်စီၤကွၢ်တသ့ဘဉ်

41. Height / Length of child ဖိသဉ်အဒိဉ်အထိ _____cm စဲးထံဉ်မံထၢဉ်

(998)☐Unable to measure ထိဉ်ကွၢ်စီၤကွၢ်တသ့ဘဉ် **(If Unable to measure, go to no. 42)**

41a. Child measured: တၢ်ထိဉ်ဖိသဉ် (1)☐Lying down မံနီၤ (2)☐Standing upဆၢထၢဉ်

42. MUAC _____ cm *(Measure on child's left arm.)*ထိဉ် ဖိသဉ်စုဒုဉ်လၢစုစ့ဉ်

(998)☐Unable to measure ထိဉ်ကွၢ်စီၤကွၢ်တသ့ဘဉ်

43. Does this child have a disability? ဖိသင်္ဘဝဲအံၤမ့ၢ်ဖိသင်္လၢအိဉ်ဒီးအက့ၢ်ဂီၤတလၢပဲၤ/ဟူးဂဲၤဖံးမၤတသ့နှဉ်၏./

(1)☐Yes/မ့ၢ် (2)☐No တမ့ၢ်ဘဉ် (999)☐Don't know တသ့ဉ်ညါဘဉ်

43a. **If Yes,** what is the disability? *(Ask caretaker for their common word.)*
မ့ၢ်အိဉ်နှဉ်,/အက့ၢ်ဂီၤတလၢတပဲၤ/ဟူးဂဲၤဖံးမၤတသ့နှဉ်မ့ၢ်တၢ်မနုၤလဲဉ်. (သံကွၢ်ပှၤကွၢ်ထွဲတၢ်လၢအဝဲသ့ဉ်အတၢ်ကတိၤညီနှၢ်)/

REFERRAL တၢ်ဆၢဃီၤဆူညါတတိၤ

44. Weight-for-height z-score/တၢ်အနိၢ်ဒိဉ်နိၢ်ထိတယၢၢ်ဃၤလၢအမးအိဉ်ဝဲ z-score
(*Refer to WHO table for z-score and referral - use <u>≤</u>1.5 for home visit and follow-up*.)
(ကွၢ်သဃဲၤအီၤလၢဟိဉ်ခိဉ်ဒီဘ့ဉ်ဆူဉ်ချ့ကရၢအစရီပူၤလၢအမ့ၢ် *z-score*အမးဒီးတၢ်ဆၢဃီၤဆူညါ/–/သူ CDC စရီလၢတၢ်ဖိခိဉ်အဂိၢ် <u>≤</u>1.5 လၢတၢ်ဟးအိဉ်သကိးဟံဉ်ဒီးလူၤကွၢ်ထွဲကၢ့ၤအီၤ)

(1) ☐<-3 ☐ Referred to TFP ☐ No referral as already enrolled
ဆၢဆူ TFP တလိဉ်ဆၢဆူညါတတိၤဘဉ်မ့ၢ်လၢအမံၤအိဉ်ဟ်လံ

(2) ☐<-2 ☐ Referred to SFP ☐ No referral as already enrolled
ဆၢဆူ SFP တလိဉ်ဆၢဆူညါတတိၤဘဉ်မ့ၢ်လၢအမံၤအိဉ်ဟ်လံ

(3) ☐-2 to <u>≤</u>-1.5 ☐ Referred to CHE/CHW
ဆၢဆူပှၤတဝၤတၢ်အိဉ်ဆူဉ်အိဉ်ချ့တၢ်ကူဉ်ဘဉ်ကူဉ်သ့/ပှၤတဝၤတၢ်အိဉ်ဆူဉ်အိဉ်ချ့ပှၤမၤတၢ်ဖိ

(4) ☐>-1.5 ☐No referral တလိဉ်တၢ်ကဘဉ်ဆၢဃီၤဆူညါတတိၤဘဉ်

(998)☐Unable to measure ထိဉ်ကွၢ်စီၤကွၢ်တသ့ဘဉ်

45. MUAC

(1) ☐<11.5 cm ☐ Referred to TFP ☐ No referral as already enrolled
ဆၢဆူ TFP ☐ တလိဉ်ဆၢဆူညါတတိၤဘဉ်မ့ၢ်လၢအမံၤအိဉ်ဟ်လံ

(2) ☐≥11.5 cm to <12.5 cm ☐ Referred to SFP ☐ No referral as already enrolled
ဆၢဆူ SFP တလိဉ်ဆၢဆူညါတတိၤဘဉ်မ့ၢ်လၢအမံၤအိဉ်ဟ်လံ

(3) ☐≥12.5 ☐No referral တလိဉ်တၢ်ကဘဉ်ဆၢဃီၤဆူညါတတိၤဘဉ်

(998)☐Unable to measure ထိဉ်ကွၢ်စီၤကွၢ်တသ့ဘဉ်

Youngest child အငယ်ဆုံး ကလေး _____Yes ဟုတ်ပါသည်/ _____No မဟုတ်ပါ

Number/ID _____ *(Refer to survey list)*
နံပါတ်/မှတ်ပုံတင်အမှတ် *(စစ်တမ်း၏ အမှတ်စဉ်ကိုယူပါ)*

Today's Date _____
ယနေ့ နေ့စွဲ

Child's Name_____ Child's PIN number _____*(Refer to ration book)* *(ရိက္ခာစာအုပ်မှယူပါ)*
ကလေး၏အမည် ကလေး၏ ပင်း နံပါတ်

Camp စခန်း _____Zone ဇုံ _____ Section ရပ်ကွက်_____ House No အိမ်နံပါတ်_____

(If registrar finds child is older than 5 years, please ask the mother to see Pink Book.)
(အကဲ့ယ်၍ စာရင်းသွင်းပေးသူက ကလေးသည် ၅ နှစ်ထက်ကြီးကြောင်းတွေ့ရှိပါက၊ ကလေးမိခင်အား ပန်းရောင်စာအုပ်ကိုတောင်း၍ကြည့်ပါရန်။)

HOUSEHOLD INFORMATION အိမ်ထောင်စုနှင့် ပတ်သက်သောသတင်းအချက်အလက်များ

1. Do you live in the same household as **this child**? ဤကလေးနှင့် သင်တအိမ်တည်း နေပါသလား။
(1) ☐Yes နေပါသည် (2) ☐No မနေပါ

1a. What is your relationship with **this child**? ဤကလေးနှင့် သင်မည်ကဲ့သို့တော်စပ်ပါသလဲ။
(1)☐Father အဖေ (2)☐Mother အမေ (3)☐Aunty/Uncle အဒေါ်/ဦးလေး
(4)☐Sister/Brother ညီမ၊အစ်မ/ညီ၊အစ်ကို (5)☐Grandparents အဖိုး၊အဖွား
(6)☐Neighbour အိမ်နီးနားချင်း
(7)☐Other (*specify*) အခြား (*အတိအကျဖော်ပြပါ*) :_____

2. How long has **this child** lived in the camp (including time spent in other camps)?
ဤကလေးသည် စခန်းတွင်နေထိုင်သောအချိန်ကာလမည်မျှကြာပြီလဲ။(အခြားသော စခန်းတွင်နေသောကာလ အပါအဝင်ဖြစ်သည်)
(1)☐Less than 1 year တစ်နှစ်အောက် (2) ☐1 year to less than 2 years ၁နှစ် မှ ၂နှစ်အောက်
(3)☐2-5 years (၂-၅)နှစ် အတွင်း (999)☐Don't know မသိပါ။

3. How many people live in the same house as **this child**? *(Includes everyone living in this household, including this child, and even persons not registered in the ration book)*?
ဤကလေးနှင့် တအိမ်တည်းအတူ နေထိုင်သူ ဘယ်နှစ်ဦးရှိပါသလဲ (ဤကလေးနှင့်တကွနေသောသူအားလုံး၊ ရိက္ခာစာအုပ်ထဲမှာပင် စာရင်းသွင်းထားခြင်းမရှိသော သူများပင်လျှင် အပါအဝင် ဖြစ်သည်။)။ လူဦးရေစုစုပေါင်း _____ total number of persons

3a. No. of people ခုက။ လူဦးရေ (1) <5 yrs ၅ နှစ်အောက် _____ (2) 5-17 yrs ၅-၁၇ နှစ်ကြား _____
(3) 18 +yrs ၁၈ နှစ် အထက် _____

4. How many of HH members are listed on TBC ration book? (*Take information from ration book.*) တိဘီစီ(TBC) ရိက္ခာစာအုပ်တွင် စာရင်းဝင်သူ အိမ်ထောင်စုဝင်ဘယ်နှစ်ဦးရှိပါသနည်း (ရိက္ခာစာအုပ်ထဲမှ အချက်အလက်ကို ယူပါ)။
_____persons ဦး။ (998)☐Don't have ration book ရိက္ခာစာအုပ် မရှိပါ။ (999)☐Don't know မသိပါ။

4a. Refer to ration book–what is HH ration book stamped: ရိက္ခာစာအုပ်ကို ကြည့်ပါ။ မည်သည့်အိမ်ထောင်စုအဖြစ် တံဆိပ်နှိပ်ထားသနည်း။
(1) ☐SR ကိုယ်ထူကိုယ်ထရပ်တည်နိုင်သူ
(2) ☐MV အားအနှဲ့ဆုံးသောသူ
(3) ☐V အားနှဲ့သောသူ
(4) ☐Standard Ration သာမန်အဆင့်ရှိသူ
(999)☐Don't know မသိပါ။

5. What is the highest grade of education the mother of **this child** completed? (Not including kindergarten)
ဤကလေး၏ မိခင်သည် ကျောင်းပညာအတန်း အမြင့်ဆုံးမည်မျှအထိပြီးမြောက်သင်ယူခဲ့သနည်း။ (သူငယ်တန်း မပါဝင်ပါ)
_____Grade အတန်း (998)☐Did not attend school ကျောင်းမနေခဲ့ရပါ။ (999)☐Don't knowမသိပါ။

6. Which ethnicity does your family most closely identify with?
သင့်မိသားစုသည် မိမိကိုယ်ကို မည်သည့်လူမျိုးဖြစ်သည်ဟု အနီးစပ်ဆုံး သတ်မှတ်ပါသနည်း။
(1)☐Karen ကရင်(Sgaw/ Pwo) စကော/ပိုး
(2)☐Karenni ကရင်နီ
(3)☐Burmese Muslim မြန်မာမူဆလင်
(4)☐Arakan ရခိုင်
(5)☐Burma မြန်မာ
(6)☐Mon မွန်
(7)☐Shan ရှမ်း (PaOo) ပအို့
(8)☐Kachin ကချင်
(9)☐Chin ချင်း
(10)☐Otherအခြား_____

CHILD HEALTH CARD ကလေးကျန်းမာရေး ကဒ်ပြား

7. Sex လိင် (1)☐Male ကျား (2)☐Female မ
(Refer to child or mother health card/lemma) (ကလေး သို့မဟုတ် မိခင် ကျန်းမာရေးကဒ်/လက်မှတ် အရ)

8. What is **this child's** birth date? (*Take the birth date of the child only from Pink Book /child or mother health card. If not available leave date blank and check below No Pink Book/child or mother health card.*)
ဤကလေး၏ မွေးနေ့သက္ကရာဇ်ကိုဖော်ပြပါ။ (ကလေး၏ မွေးသက္ကရာဇ်ကို ပန်းရောင်စာအုပ်/ကလေး သို့မဟုတ် မိခင်၏ ကျန်းမာရေးဒ်ပြားမှ ယူပါ။ အကယ်၍ ၎င်းကိုမရနိုင်ပါက ကွက်လပ်ချန်ထားပြီး၊ အောက်တွင်ပေးထားသည့် ပန်းရောင်စာအုပ်မရှိဟု ဖြည့်ပေးပါ)
Day (dd) နေ့(ရက်) _____ Month (mm) လ _____ Year (yyyy) ခုနှစ် _____ (999)☐Don't know မသိပါ
(998)☐No Pink Book/child or mother health card ပန်းရောင်စာအုပ်/ကလေး (သို့မဟုတ်) မိခင်ကျန်းမာရေးဒ်ပြားမရှိ

9. Birth weight မွေးကင်းစအလေးချိန် _____g ဂရမ် (သို့) OR _____kg ကီလိုဂရမ်
(*Take the birth weight of the child only from Pink Book /child or mother health card. If not available leave weight blank and check below No Pink Book/child or mother health card.*) (ကလေး၏ မွေးကင်းစ အလေးချိန်ကို ပန်းရောင်စာအုပ်/ကလေး (သို့မဟုတ်) မိခင်ကျန်းမာရေးကဒ်ပြားမှာ ကြည့်ပါ။ အကယ်၍ ၎င်းကိုမရနိုင်ပါက ကွက်လပ်ချန်ထားပြီး၊ အောက်မှာပေးထားသည့် ပန်းရောင်စာအုပ်မရှိ၊ ကလေး (သို့မဟုတ်) မိခင်ကျန်းမာရေးကဒ်ပြားမရှိဟု ကွက်လပ်တွင်ခြစ်ပါပါ)
(998)☐No Pink Book /child or mother health card ပန်းရောင်စာအုပ်/ကလေး (သို့မဟုတ်) မိခင် ကျန်းမာရေးဒ်ပြားမရှိ
(999)☐Don't know မသိပါ

10. Does **this child** attend nursery school in the camp? (*Does not include kindergarten.*) ဤကလေးသည် စခန်းထဲတွင် မူကြိုကျောင်းတက်ပါသလား(*မိခင်အားမေးပါ- သူငယ်တန်းမပါဝင်ပါ*)
(1)☐Yes တက်ပါသည် (2)☐No မတက်ပါ (999)☐Don't know မသိပါ

11. Is **this child** currently enrolled in: *(Refer to child's health card/lemma)* ဤကလေးကို ဖြည့်စွက်စာ အာဟာရကျွေးခြင်း အစီအစဉ်(SFP)/ကုသမှုဆိုင်ရာ အာဟာရကျွေးမွေးခြင်းအစီအစဉ်(TFP)တွင် ယခု စာရင်းသွင်းထားပါသလား (ကလေး၏ ကျန်းမာရေးကဒ်/လက်မှတ်ကို ကြည့်ပါ)။
(1)☐SFP ဖြည့်စွက်စာ အာဟာရကျွေးခြင်းအစီအစဉ် (2) ☐TFP ကုသမှုဆိုင်ရာအာဟာရကျွေးခြင်း အစီအစဉ်
(3)☐Not Enrolled စာရင်းသွင်းမထားပါ (999)☐Don't know မသိပါ

11a. If YES, how long has **this child** been enrolled in SFP / TFP? အကယ်၍ စာရင်းသွင်းထားသည်ဟု ဆိုလျှင်၊ ဖြည့်စွက်စာ အာဟာရ ကျွေးခြင်းအစီအစဉ်(SFP)/ ကုသမှုဆိုင်ရာ အာဟာရကျွေးခြင်းအစီအစဉ်(TFP)တွင် စာရင်းသွင်းထားခဲ့သည်မှာ မည်မျှကြာခဲ့ပြီနည်း။ (1)☐Less than 2 weeks ၂ပါတ် ထက်နည်း (2) ☐2-6 weeks (၂-၆)ပါတ်အတွင်း
(3)☐More than 6 weeks ၆ ပါတ်ကျော် (999)☐Don't know မသိပါ။

12. Has **this child** ever been enrolled in SFP / TFP? ဤကလေးသည် ဖြည့်စွက်စာအာဟာရကျွေးခြင်း အစီအစဉ်(SFP)/ ကုသမှုဆိုင်ရာ အာဟာရကျွေးခြင်းအစီအစဉ်(TFP)မှာ စာရင်းဝင်ခဲ့ဖူးပါသလား။

(1)☐Yes စာရင်းဝင်ဖူးပါသည် (2)☐No စာရင်းမဝင်ဖူးပါ (999)☐Don't know မသိပါ။

12a. If YES, reason for exit. အကယ်၍ စာရင်းဝင်ဖူးခဲ့သည်ဟုဆိုလျှင်၊ အစီအစဉ်မှ ထွက်ခွာခဲ့သော အကြောင်းရင်းကိုပြောပါ။

(1)☐Cured ရောဂါပျောက်ကင်းခဲ့ခြင်းကြောင့် (2)☐Default ပျက်ကွက်ခဲ့ခြင်းကြောင့် (999)☐Don't know မသိပါ။

13. Date **this child** last received vitamin A *(Refer to child's health card/lemma)* ဤကလေး ဗီတာမင်-အေ ရရှိခဲ့သော နောက်ဆုံး နေ့ရက် *(ကလေး၏ကျန်းမာရေးကဒ်/လက်မှတ် အရ)*

Day (dd) နေ့(ရက်)_____Month(mm) လ_____Year (yyyy) ခုနှစ် _____(998)☐No record မှတ်တမ်းမရှိပါ။

14. Date **this child's** last de-worming *(Refer to child's health card/lemma)* ဤကလေး သံချဆေး ရရှိခဲ့သော နောက်ဆုံး နေ့ရက် *(ကလေး၏ကျန်းမာရေးကဒ်/လက်မှတ် အရ)*

Day (dd) နေ့(ရက်)_____Month(mm) လ _____ Year (yyyy) ခုနှစ် _____ (998)☐No record မှတ်တမ်းမရှိပါ။

HOUSEHOLD HUNGER SCALE အိမ်ထောင်စု ဆာလောင်မှုအတိုင်းအတာ (အခြေအနေ)

15. In the past 4 weeks (30 days), was there ever **no food to eat** of any kind in your house because of lack of resources to get food? အစားအစာ အရင်းအမြစ်များမရှိသဖြင့် လွန်ခဲ့သည့် ရက်သတ္တ ၄ ပါတ်(၃၀ရက်)အတွင်း သင့်အိမ်ထောင်စုတွင် စားရမဲ့ သောက်ရမဲ့ ဖြစ်ခဲ့ပါသလား။

(1)☐Yes ဖြစ်ခဲ့ပါသည် (2)☐No မဖြစ်ခဲ့ပါ **(If NO, go to no. 16)** (မဖြစ်ခဲ့ပါဟု ဆိုလျှင် နံပါတ် ၁၆ သို့သွားပါ)
(999)☐Don't know မသိပါ။

15a. How often did this happen? ဘယ်လောက် မကြာမကြာ ဖြစ်တတ်ပါသလဲ။

(1) ☐Rarely (1 – 2 times) ဖြစ်ခဲသည် (၁-၂ ကြိမ်)
(2) ☐Sometimes (3 – 10 times) တခါတရံ (၃- ၁၀ ကြိမ်)
(3) ☐Often (more than 10 times) မကြာခဏ(၁၀ ကြိမ်ထက်များသည်)
(999)☐Don't know မသိပါ

16. In the last 4 weeks (30 days), was there a time when you or any household member went to sleep at night hungry without eating anything at all because there was not enough food? အစားအသောက် မလောက်ငသဖြင့် လွန်ခဲ့သည် ရက်သတ္တ ၄ ပါတ်(၃၀ရက်)အတွင်း သင့်အိမ်ထောင်စုတွင် သင်(သို့)မိသားစုဝင် တစ်ဦးဦးသည် ညစာမစားခဲ့ရဘဲ ဆာလောင်စွာဖြင့် အိပ်ရာဝင်ခဲ့ရတဲ့ အချိန်မျိုးရှိဖူးပါသလား။

(1) ☐Yes ရှိခဲ့ပါသည် (2)☐No မရှိခဲ့ပါ **(If NO, go to no. 17)** (မရှိခဲ့ပါဟုဆိုလျှင် နံပါတ် ၁၇ သို့သွားပါ)
(999)☐Don't know မသိပါ။

16a. How often did this happen? ဘယ်လောက် မကြာမကြာ ဖြစ်တတ်ပါသလဲ။

(1) ☐Rarely (1 – 2 times) ဖြစ်ခဲသည် (၁-၂ ကြိမ်)
(2) ☐Sometimes (3 – 10 times) တခါတရံ (၃- ၁၀ ကြိမ်)
(3) ☐Often (more than 10 times) မကြာခဏ(၁၀ ကြိမ်ထက်များသည်)
(999)☐Don't know မသိပါ

17. In the last 4 weeks (30 days) was there a time when you or any household member went a whole day and night without eating anything at all because there was not enough food? အစားအသောက်မလောက်ငသဖြင့် လွန်ခဲ့သည် ရက်သတ္တ ၄ ပါတ်(၃၀ရက်)အတွင်း သင့်အိမ်ထောင်စုတွင် သင်(သို့)မိသားစုထဲဝင် တစ်ဦးဦးသည် တနေ့လုံးသာမက တညလုံးလည်း ဘာမှမစားရတဲ့ အချိန်မျိုးရှိဖူးပါသလား။

(1) ☐Yes ရှိခဲ့ပါသည် (2)☐No မရှိခဲ့ပါ **(If NO, go to no. 18)** (မရှိခဲ့ပါဟု ဆိုလျှင်၊ နံပါတ် ၁၈ သို့သွားပါ)
(999)☐Don't know မသိပါ။

17a. How often did this happen? ဘယ်လောက်မကြာမကြာ ဖြစ်တတ်ပါသလဲ။

(1) ☐Rarely (1 – 2 times) ဖြစ်ခဲသည် (၁-၂ ကြိမ်)

(2) ☐Sometimes (3 – 10 times) တခါတရံ (၃- ၁၀ ကြိမ်)

(3) ☐Often (more than 10 times) မကြာခဏ(၁၀ ကြိမ်ထက်များသည်)

(999)☐Don't know မသိပါ

FOOD CONSUMPTION SCORE (FCS-N) အစားအစာ စားသုံးမှုထင်မြင်ချက် ရမှတ် (FCS-N)

18. During the past week, how many days have each of these types of foods been eaten in your household?
လွန်ခဲ့သောအပါတ်အတွင်းမှာ သင့်အိမ်ထောင်စုတွင် အောက်ပါအစားအစာအမျိုးမျိုးကို ရက်ပေါင်းမည်မျှစားခဲ့ကြောင်းကို ပြောပြပါ။

Food item ပါဝင်သည့် အစားအစာ	# days eaten in past 7 days လွန်ခဲ့သော (၇)ရက်အတွင်းမှာ စားခဲ့သော ရက်ပေါင်း အရေအတွက်
18.1 Rice & Other Grains: ဆန်နှင့် အခြားကောက်ပဲသီးနှံများ- Including rice, noodles, wheat, bread, corn ဆန်၊ ခေါက်ဆွဲ၊ ဂျုံ၊ ပေါင်မုန့်၊ ပြောင်းဖူး အပါအဝင်ဖြစ်သည်	
18.2 Tubers: သစ်ဥ သစ်ဖုများ- Including yams, potatoes, white flesh sweet potatoes, taro သစ်ဥ သစ်ဖုများအပါအဝင် မျောက်ဥ၊ အာလူး၊ ကန်စွန်းဥအဖြူ နှင့် ပိန်းဥ	
18.3 Pulses: ပဲခြမ်းများ- Including any types of beans, lentils, peas, nuts, soy, soy milk, tofu ပဲ အမျိုးမျိုး အပါအဝင် ပဲခြမ်းဝါ၊ ပဲနီကလေး၊ ပဲစေ့၊ မြေပဲ၊ ပဲပုပ်စေ့၊ ပဲနို့ရည်၊ ပဲပြား	
18.4 Milk & Dairy: နို့နှင့် နို့ထွက် ပစ္စည်းများ- Including any fresh or powdered milk, yoghurt (Excluding tinned sweetened condensed milk) နွားနို့ (သို့) နို့မှုန့်၊ ဒိန်ချဉ် အပါအဝင်ဖြစ်သည်(နို့ဆီမပါ)	
18.5 Flesh Meat: တိရစ္ဆာန် အသား Including fresh/tinned beef, pork, goat, chicken, duck, birds, insects, frogs, wild animals လတ်ဆတ်သောအသား အပါအဝင် အမဲသား၊ အမဲဖူး၊ ဝက်သား၊ ဆိတ်သား၊ ကြက်သား၊ ဘဲသား၊ ငှက်သား၊ ပိုးကောင်များ၊ ဖား၊ တောတိရစ္ဆာန် အသားများ	
18.6 Fish/Shellfish: ငါး/အခွံမာရှိသောငါး Including fresh, dried, salted, tinned fish or shellfish လတ်ဆတ်သောငါး အပါအဝင် ငါးခြောက်၊ ငါးဆားနယ်၊ ငါးဖူး၊ (သို့) အခွံမာရှိသော ငါးများ	
18.7 Organ Meat: တိရစ္ဆာန်ဝမ်းတွင်းကလီစာ Including liver, kidney, heart or any other organ meat တိရစ္ဆာန်အသည်း၊ ကျောက်ကပ်၊ နလုံး (သို့မဟုတ်) အခြားဝမ်းတွင်းကလီစာများ	
18.8 Any Eggs ဥအမျိုးမျိုး	
18.9 Any Vegetables or Leaves ဟင်းသီးဟင်းရွက် တစ်မျိုးမျိုး	
18.10 Yellow Orange Vegetables: အဝါရောင်/လိမ္မော်ရောင် ဟင်းသီးဟင်းရွက်များ- Including pumpkin, carrots, capsicum (red peppers), orange sweet potatoes ရွေဖရုံသီး၊ မုန်လာဥနီ၊ ငရုပ်ပွနီ၊ ကန်စွန်းဥအဝါရောင် အပါအဝင်	
18.11 Dark Green Leafy Vegetables: အစိမ်းရင့်ရောင် ဟင်းရွက်များ- Including kale, pumpkin leaf, other dark green leaves ကိုက်လန်ရွက်၊ ရွေဖရုံညွှန့် သို့မဟုတ် အစိမ်းရင့်ရောင်ရှိသော အခြား ဟင်းရွက်များအပါအဝင်	
18.12 Any Fruits သစ်သီးတစ်မျိုးမျိုး-	
18.13 Yellow Orange Fruits: အဝါရောင်/လိမ္မော်ရောင် သစ်သီးများ- Including mango, papaya and similar (excluding oranges & bananas) သရက်သီး၊ သင်္ဘောသီးနှင့် အလားတူ သစ်သီးများ အပါအဝင်ဖြစ်သည် (လိမ္မော်သီးများ နှင့် ငှက်ပျောသီးများမပါ)	

Food item ပါဝင်သည့် အစားအစာ	# days eaten in past 7 days လွန်ခဲ့သော (၇)ရက်အတွင်းမှာ စားခဲ့သော ရက်ပေါင်း အရေအတွက်
18.14 Oils & Fats: ဟင်းသီးဟင်းရွက်ဆီနှင့် တိရစ္ဆာန်အဆီများ- Cooking oils, margarine/butter, meat fat စားဆီ၊ ထောပတ်ဆီနှင့် တိရစ္ဆာန်အဆီများ အပါအဝင်	
18.15 Sugar: သကြား Including sugar, honey, jam, cakes, sugary drinks/snacks, tinned sweetened condensed milk, 3-in-1 coffee, Milo/Ovaltine သကြား၊ ပျားရည်၊ ယို၊ ကိတ်မုန့်များ၊ အချိုရည်များနှင့် မုန့်ခြောက်အချိုများ၊ နို့ဆီ၊ ကော်ဖီ၊ မိုင်လိုနှင့် အိုဗာတင်း အပါအဝင်	
18.16 Asia*RE*Mix အေးရှရီမစ်	
18.17 BabyBRIGHT ဘေဘီဘရိုက်	
18.18 Condiments / Spices: ဟင်းခတ်အမွှေးအကြိုင်များ/ အဆပလာများ Salt, chili, tea, Rodi, Ajinomoto MSG, fish/shrimp paste ဆား၊ ငရုပ်သီး၊ လက်ဖက်၊ ရိုဒီအသားမှုန့်၊ ဟင်းချိုမှုန့်၊ ငါးပိ၊ ပုဇွန်ငါးပိ	

FEEDING PRACTICES - MATERNAL ကျွေးမွေးခြင်း အလေ့အကျင့်များ - မိခင်

19. How old is your **youngest child**? သင့်အငယ်ဆုံးကလေး အသက်ဘယ်နယ်နှစ်ရှိပြီလဲ။

_____ (Months) လ OR _____ (Years) နှစ် (999) ☐Don't know မသိပါ။

20. After the delivery of your **youngest child**, did you restrict the kinds of foods you ate?
သင့်အငယ်ဆုံးကလေး မွေးဖွားပြီးချိန်တွင် သင်နှင့် မတည့်သော အစားအစာများကို ရှောင်ခဲ့ခြင်းရှိပါသလား။

(1)☐Yes ရှောင်ခဲ့ပါသည် (2)☐No မရှောင်ခဲ့ပါ။ (999) ☐Don't know မသိပါ။

20a. If YES, which foods did you restrict? ရှောင်ခဲ့သည်ဟု ဆိုလျှင်၊ မည်သည့်အစားအစာများကို ရှောင်ခဲ့ပါသနည်။

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21. Are you still currently breastfeeding? သင်ယခုလက်ရှိ မိခင်နို့ရည် တိုက်နေပါသလား။

(1)☐Yes တိုက်နေပါသည်။ (2)☐No မတိုက်ပါ။ (999)☐Don't know မသိပါ။

(If YES, go to no. 23.) (တိုက်နေပါဟု ဆိုလျှင်၊ နံပါတ် ၂၃ သို့သွားပါ)

22. How old was your **youngest child** when you stopped breastfeeding him/her? သင့်အငယ်ဆုံးကလေး နို့ဖြတ်ခဲ့စဉ်အချိန်က အသက်ဘယ်နယ်နှစ်ရှိပြီလဲ။

_____ (Months) လ OR _____ (Years) နှစ် (999) ☐Don't know မသိပါ။

23a. Did you go to the Antenatal Clinic (ANC) as soon as you were pregnant with your **youngest child**?
သင့်အငယ်ဆုံးကလေး ကိုယ်ဝန်ဆောင်ခဲ့စဉ်က ကိုယ်ဝန်စရှိခဲ့ကြောင်းသိသိချင်း သားဖွားဆေးခန်း(ANC)သို့ သင်သွားခဲ့ပါသလား။

(1)☐Yes သွားခဲ့ပါသည် (2)☐No မသွားခဲ့ပါ (999)☐Don't know မသိပါ။

23b. How many months gestation were you when you first visited Antenatal clinic (ANC) when you were pregnant with your **youngest child**? (*Take information from Pink Book if available* သင့်အငယ်ဆုံးကလေး ကိုယ်ဝန်ဆောင့်ခဲ့စဉ်က သင်သားဖွားဆေးခန်းသို့ ပထမဆုံး သွားရောက်ပြသချိန်တွင် ကိုယ်ဝန်ဘယ်နှစ်လရှိနေပြီလဲ။ (*အကယ်၍ ဖြစ်နိုင်လျှင် ပန်းရောင်စာအုပ်ထဲမှ အချက်အလက်ကိုယူပါ*)။

(1)☐1-3 months (၁-၃) လ
(2)☐4-7 months(၄-၇) လ
(3)☐≥8 months ၈လ သို့မဟုတ် ၈လ အထက်
(4) ☐Did not attend ANC when pregnant with youngest child အငယ်ဆုံးကလေး ကိုယ်ဝန်ဆောင်စဉ်က သားဖွားဆေးခန်းသို့မသွားခဲ့ပါ။
(999)☐Don't know မသိပါ။

24. Did you take any of the following supplements when you were pregnant or breastfeeding your **youngest child**? သင့်အငယ်ဆုံးကလေး ကိုယ်ဝန်ဆောင်ခဲ့စဉ် သို့မဟုတ် နို့တိုက်ခဲ့စဉ်က အောက်ပါ ဖြည့်စွက်အားဆေးများထဲမှ တစ်ခုခုကို သောက်ခဲ့ဖူးပါသလား။

24a. Iron supplement သံဓာတ်အားဆေး (1)☐Yes သောက်ခဲ့ပါသည် (2)☐No မသောက်ခဲ့ပါ။ (999)☐Don't know မသိပါ။

24b. Vitamin A ဗီတာမင်-အေ အားဆေး (1)☐Yesသောက်ခဲ့ပါသည် (2)☐No မသောက်ခဲ့ပါ။ (999)☐Don't know မသိပါ။

24c. Folic acid ဖောလစ်ဓာတ်အားဆေး (1)☐Yes သောက်ခဲ့ပါသည် (2)☐No မသောက်ခဲ့ပါ။ (999)☐Don't know မသိပါ။

24d. ☐Other (*specify*) အခြား*(အတိအကျဖေါ်ပြပါ)* _____

25. What are benefits of weight gain for both the mother and baby during pregnancy? (*Participant can answer more than 1 choice.*)
ကိုယ်ဝန်ဆောင်ကာလအတွင်းမှ မိခင် (သို့မဟုတ်) ကလေးအတွက် ကိုယ်အလေးချိန်တိုးလာခြင်း၏ အကျိုးကျေးဇူးများကို ပြောပြပါ (ဖြေကြားသူက ရွေးစရာ တခုထက်ပို၍ ရွေးချယ်ဖြေကြားနိုင်ပါသည်)။

(1)☐Prevent risk of maternal complications and death ကိုယ်ဝန်ဆောင်မှုဆိုင်ရာ ဆင့်ပွားရောဂါများနှင့် သေဆုံးမှုအန္တရာယ်များမှ ကြိုတင်ကာကွယ်ပေးခြင်း

(2)☐Prevent anemia in pregnancy ကိုယ်ဝန်ဆောင်စဉ် သွေးအားနည်းရောဂါမဖြစ်အောင် ကာကွယ်ပေးခြင်း

(3)☐Prevent low birth weight and premature baby ကိုယ်အလေးချိန်နည်းသောကလေးနှင့် ရက်လမစေ့သောကလေး မွေးခြင်းတို့မဖြစ်အောင် ကြိုတင်ကာကွယ်ပေးခြင်း

(4)☐Prevent infection for baby and mother ကလေးနှင့် မိခင်အတွက် ရောဂါပိုးမဝင်နိုင်အောင် ကြိုတင်ကာကွယ်ပေးခြင်း

(5)☐ Promote child growth and development in early childhood ကလေးဘဝအစောပိုင်းကာလတွင် ကြီးထွားမှုနှင့် ဖွံ့ဖြိုးမှုတို့ကို အားပေးခြင်း

(6)☐Other(*specify)*အခြား*(အတိအကျဖေါ်ပြပါ)*_____

_____

(999)☐Don't know မသိပါ။

26. When you were pregnant with your **youngest child**, how did you eat compared to when you were not pregnant? (*Ask mother to select one answer for each of the following questions. For questions 26b and 26c, use food photos to show examples of protein and iron-rich foods.)*
သင့်အငယ်ဆုံးကလေး ကိုယ်ဝန်ဆောင်ခဲ့စဉ်က အစာစားရာ၌ ကိုယ်ဝန်မဆောင်ခင်အချိန်ကနှင့် နှိုင်းယှဉ်မည်ဆိုလျှင် မည်ကဲ့သို့စားခဲ့သနည်း။ *(မိခင်အား အောက်ပါမေးခွန်းများ၏ အဖြေတခုခုကို ရွေးချယ်ပါစေ၊ မေးခွန်း 26bနှင့် 26c အတွက် ပရိုးတင်းဓါတ်နှင့် သံဓါတ်ကြွယ်ဝသော အစားအစာပုံကို အသုံးပြု၍ ဥပမာပြပေးပါ)*။

26a. Ate: စားခဲ့ပုံမှာ- (1) ☐More food အစာပိုစားသည်။
(2) ☐Less food အစာလျော့စားသည်။
(3) ☐Same amount of food အစာပမာဏ အတူတူသာစားသည်။
(999)☐Don't know မသိပါ

26b. Ate: စားခဲ့ပုံမှာ- (1) ☐More protein-rich (body building) foods ပရိုတိန်းဓါတ် (ကိုယ်ခန္ဓာ တည်ဆောက်စေသောဓါတ်)ကြွယ်ဝသော အစားအစာများကို ပိုစားသည်။
(2) ☐Less protein-rich (body building) foods ပရိုတိန်းဓါတ် (ကိုယ်ခန္ဓာ တည်ဆောက်စေသောဓါတ်)ကြွယ်ဝသော အစားအစာများကို လျော့စားသည်။
(3) ☐Same amount of protein-rich (body building) foods ပရိုတိန်းဓါတ် ကိုယ်ခန္ဓာ တည်ဆောက်စေသောဓါတ်)ကြွယ်ဝသော အစားအစာများကို ကိုယ်ဝန်မဆောင်ခင်က စားသကဲ့သို့ ပမာဏအတူတူ စားပါသည်။
(999)☐Don't know မသိပါ

26c. Ate: စားခဲ့ပုံမှာ- (1) ☐More iron-rich (protective) foods သံဓါတ်(ကာကွယ်စေသောဓါတ်) ကြွယ်ဝသော အစားအစာများကို ပိုစားသည်။

(2) ☐Less iron-rich (protective) foods သံဓါတ် (ကာကွယ်စေသောဓါတ်) ကြွယ်ဝသော အစားအစာများကို လျော့စားသည်။

(3) ☐Same amount of iron-rich (protective) foods သံဓါတ်(ကာကွယ်စေသောဓါတ်) ကြွယ်ဝသော အစားအစာများကို ကိုယ်ဝန်မဆောင်ခင်က စားသကဲ့သို့ ပမာဏအတူတူစားပါသည်။

(999)☐Don't know မသိပါ

27. When you were breastfeeding **your youngest child**, how did you eat compared to when you were not breastfeeding and not pregnant? (*Ask mother to select one answer for each of the following questions. For questions 27b and 27c, use food photos to show examples of protein and iron-rich foods.)*
သင့်အငယ်ဆုံးကလေး နို့တိုက်ခဲ့စဉ်က အစာစားရာ၌ သင်နို့မတိုက်နေစဉ်ကာလနှင့် **ကိုယ်ဝန်မဆောင်မီကာလဖြင့်** နှိုင်းယှဉ်မည်ဆိုလျှင် မည်ကဲ့သို့ စားခဲ့သနည်း။ *(မိခင်အား အောက်ပါမေးခွန်းများ၏ အဖြေတခုခုကို ရွေးချယ်ပါစေ၊ မေးခွန်း 27b နှင့် 27c အတွက် ပရိုးတင်းဓါတ်နှင့် သံဓါတ်ကြွယ်ဝသော အစားအစာပုံကို အသုံးပြု၍ ဥပမာပြပေးပါ)*။

27a. Ate: စားခဲ့ပုံမှာ-(1) ☐More food အစာပိုစားသည်။

(2) ☐Less food အစာလျော့စားသည်။

(3) ☐Same amount of food နို့မတိုက်ခင်က စားခဲ့သောပမာဏအတိုင်း စားသည်။

(999)☐Don't know မသိပါ

27b. Ate: စားခဲ့ပုံမှာ- (1) ☐More protein-rich (body building) foods ပရိုတိန်းဓါတ် (ကိုယ်ခန္ဓာတည်ဆောက်စေသောဓါတ်)ကြွယ်ဝသော အစားအစာများကို ပိုစားသည်။

(2) ☐Less protein-rich (body building) foods ပရိုတိန်းဓါတ် (ကိုယ်ခန္ဓာ တည်ဆောက်စေသောဓါတ်)ကြွယ်ဝသော အစားအစာများကို လျော့စားသည်။

(3) ☐Same amount of protein-rich (body building) foods ပရိုတိန်းဓါတ် ကိုယ်ခန္ဓာ တည်ဆောက်စေသောဓါတ်)ကြွယ်ဝသော အစားအစာများကို နို့မတိုက်ခင်က စားခဲ့သလောက် စားသည်။

(999)☐Don't know မသိပါ

27c. Ate: စားပုံမှာ- (1) ☐More iron-rich (protective) foods သံဓါတ်(ကာကွယ်စေသောဓါတ်)ကြွယ်ဝသော အစားအစာများကို ပိုစားသည်။

(2) ☐Less iron-rich (protective) foods သံဓါတ် (ကာကွယ်စေသောဓါတ်)ကြွယ်ဝသော အစားအစာများကို လျော့စားသည်။

(3) ☐Same amount of iron-rich (protective) foods သံဓါတ်(ကာကွယ်စေသောဓါတ်) ကြွယ်ဝသော အစားအစာများကို နို့မတိုက်ခင်က စားခဲ့သလောက် စားသည်။

(999)☐Don't know မသိပါ

FEEDING PRACTICES - BREASTFEEDING ကျွေးမွေးခြင်း အလေ့အကျင့်များ - မိခင်နို့တိုက်ခြင်း

28. For your **youngest child**, how long after birth did you put the newborn to the breast?
သင့်အငယ်ဆုံးကလေး မွေးဖွားပြီး မည်မျှအကြာတွင် မွေးစကလေးကို မိခင်နို့ စတိုက်ခဲ့သနည်း။

(1)☐Immediately or within one hour after birth ကလေးမီးဖွားပြီးပြီးချင်း (သို့မဟုတ်) တစ်နာရီအတွင်းမှာ

(2)☐Within 24 hours (not < 1 hr) ၂၄ နာရီအတွင်းမှာ (၁ နာရီထက် မနည်း သောအချိန်အတွင်း မပါ)

(3)☐Never breastfed မိခင်နို့ လုံးဝမတိုက်ခဲ့ပါ။ (999)☐Don't know မသိပါ

(4)☐Other *(specify)* အခြား*(အတိအကျဖေါ်ပြပါ)* _____

29. Has **this child** ever been breastfed? ဤကလေးကို မိခင်နို့ရည် တိုက်ခဲ့ဖူးပါသလား။

(1)☐Yes တိုက်ခဲ့ဖူးပါသည် (2)☐No မတိုက်ခဲ့ဖူးပါ (999)☐Don't know မသိပါ။

(If NO, go to no. 31) (မတိုက်ခဲ့ဖူးပါဟု ဆိုလျှင် နံပါတ် ၃၁ သို့ သွားပါ**)**

30. Is **this child** currently breastfeeding? ဤကလေးအား ယခုလောလောဆယ် မိခင်နို့ရည်တိုက်နေပါသလား။

(1)☐Yes တိုက်နေပါသည် (2)☐No မတိုက်ပါ (999)☐Don't know မသိပါ။

30a. For how many months has **this child** been breastfeeding?

ဤကလေးအား မိခင်နို့ရည်တိုက်ကျွေးနေသည်မှာ လပေါင်း မည်မျှကြာပြီလဲ။ _____ months လ။ (999)☐Don't know မသိပါ။

31. How many months old was **this child** when you started giving water?

ဤကလေးကို ရေစတိုက်ခဲ့ချိန်တွင် အသက် ဘယ်နှစ်လရှိပြီလဲ။ _____months လ။ (999)☐Don't know မသိပါ။

32. What are the benefits of exclusive breastfeeding (*No water or any other foods or liquids.*)
(Do not read the answer; participant can answer more than 1 choice.)
ကလေးအား မိခင်နို့ရည်တစ်မျိုးတည်း(ရေ သို့မဟုတ် မည်သည့်အခြားအစာနှင့် အရည်တစုံတရာမှ မပါ) တိုက်ခြင်း၏
အကျိုးကျေးဇူးများကို ဖော်ပြပေးပါ။ (အဖြေကို မဖတ်ပြပါနှင့်။ ဖြေကြားသူက ရွေးစရာ တခုထက်ပို၍ ရွေးချယ်ဖြေကြားနိုင်ပါသည်)

(1) ☐Sufficient nutrients for baby ကလေးအဖို့ လုံလောက်သော အာဟာရ ရရှိခြင်း

(2) ☐Protects baby from infections ကလေးအား ရောဂါပိုးများမှ ကာကွယ်ပေးခြင်း

(3) ☐Promotes optimum growth and development အသင့်တော်ဆုံးသော ကြီးထွားမှုနှင့် ဖွံ့ဖြိုးမှုတို့ကို ရရှိခြင်း

(4) ☐Reduce the risk of post-partum bleeding မီးဖွားပြီးချိန် သွေးသွန်မှု အန္တရာယ်မှ လျော့နည်းစေခြင်း

(5) ☐Promotes bonding and motherhood သံယောဇဉ်တို့၍ မိခင်စိတ်တို့ကို ရရှိစေခြင်း

(6) ☐Decreases breast, ovarian and cervical cancers ရင်သား၊ သားအိမ်နှင့် သားအိမ်ခေါင်း ကင်ဆာဖြစ်ပွားမှုများမှ လျော့နည်းစေခြင်း

(7) ☐Delays new pregnancy ကိုယ်ဝန်ပြန်ထပ်ဆောင်ရန် နှောင့်နှေးစေခြင်း

(8) ☐Weight loss for mother မိခင်အတွက် ကိုယ်အလေးချိန်လျော့နည်းစေခြင်း

(9)Others (*explain*) အခြား (*ရှင်းပြပါ*) _____

(999)☐Don't know မသိပါ။

FEEDING PRACTICES – COMPLEMENTARY FEEDING ကျွေးမွေးခြင်း အလေ့အကျင့်များ- ဖြည့်စွက်စာကျွေးမွေးခြင်း

33. How old was **this child** when you gave the first meal? (*Meal is solid food, or semi-solid food and soft food.)*
ဤကလေး မည်သည့်အသက်အရွယ်တွင် ပထမဦးဆုံးအစာကို စတင်ကျွေးခဲ့သနည်း။(အစာမာ၊ အစာမပြော့မမာ နှင့် အစာပြော့ပြော့)

(1) ☐Less than 2 weeks (၂ ပါတ်မပြည့်မီအရွယ်။)

(2) ☐2 weeks- less than 1 month (၂ ပါတ် - ၁ လမပြည့်မီ) အရွယ်အတွင်း။

(3) ☐1 month- less than 4 months (၁ လ-၄လမပြည့်မီ) အရွယ်အတွင်း။

(4) ☐4 months- less than 6 months (၄လ-၆လ မပြည့်မီ) အရွယ်အတွင်း။

(5) ☐At 6 months (၆ လ) အရွယ်တွင်။

(6) ☐7 months & above (၇) လနှင့် အထက်အရွယ်တွင်

(7) ☐Has not yet given စပြီးမကျွေးရသေးပါ။

(999)☐Don't know မသိပါ

34. How many meals did this child eat during last 24 hours? *(Meals refer to staple food, not small snacks.)* ဤကလေး လွန်ခဲ့သည့် ၂၄နာရီအတွင်းတွင် အစားအစာဘယ်နှစ်ကြိမ် စားခဲ့ပါသလဲ။ (အစားသည် အဓိကအစာကို ဆိုလိုပါသည်။ သရေစာမုန့်ကို မဆိုလိုပါ။) Number of meals အစားအစာ စားခဲ့သော အကြိမ်ရေ _____ (999)☐Don't know မသိပါ

35. How many times did **this child** eat a snack during last 24 hours? ဤကလေး လွန်ခဲ့သည့် ၂၄နာရီအတွင်းတွင် သရေစာမုန့် ဘယ်နှစ်ကြိမ်စားခဲ့ပါသလဲ။ *(Kanom, AsiaREMix snacks, fruit, other)* (မုန့်၊ အေးရှရီမစ်မုန့်၊ သစ်သီး၊ အခြား)
Number of times မုန့်စားခဲ့သောအကြိမ်ရေ _____ (999)☐Don't know မသိပါ

36. During the **past week** did **this child** eat any Asia*RE*Mix? ဤကလေး လွန်ခဲ့သည့်အပါတ်အတွင်းတွင် အေးရှရီမစ် စားခဲ့ပါသလား။
(1)☐Yes စားခဲ့ပါသည် (2)☐No မစားခဲ့ပါ (999)☐Don't know မသိပါ။

36a. If YES, how many days did the child eat Asia*RE*Mix အကယ်၍ စားခဲ့သည်ဆိုပါက၊ ကလေး အေးရှားရီမစ် ဘယ်နှစ်ရက်စားခဲ့ပါသလဲ။ _____ days ရက် (999)☐Don't know မသိပါ

36b. If NO, why not? အကယ်၍မစားဟု ဆိုပါက၊ ဘာကြောင့် မစားခဲ့သလဲ။
(1)☐Cannot cook it မချက်တတ်ပါ၊ မလုပ်တတ်ပါ (999)☐Don't know မသိပါ။
(2)☐Run out of Asia*RE*MIX အေးရှားရီမစ်ကုန်သွားသည်
(3)☐Child does not like it ကလေး မကြိုက်ပါ
(4)☐Not enough oil to cook ကြော်ရန်ဆီမလောက်ပါ
(5)☐Do not receive Asia*RE*MIX because use Food Card System အစားအစာကဒ်အသုံးပြုသောကြောင့် အေးရှားရီမစ် မရပါ
(6)☐Other အခြားအကြောင်းကြောင့် _____

37. What are benefits of eating Asia*RE*Mix? *(Do not read the answer; participant can answer > 1 answer.)* အေးရှားရီမစ်စားခြင်း၏ အကျိုးကျေးဇူးများကို ဖေါ်ပြပါ (အဖြေများကို မဖတ်ပြပါနှင့်။ ဖြေကြားသူက ရွေးစရာ တခုထက်ပို၍ ရွေးချယ်ဖြေကြားနိုင်ပါသည်)။
(1)☐Sufficient nutrients for baby ကလေးအဖို့ လုံလောက်သော အာဟာရ ရရှိခြင်း
(2)☐Protects baby from infections ကလေးအား ရောဂါပိုးများမှ ကာကွယ်ပေးခြင်း
(3)☐Promotes optimum growth and development အကောင်းဆုံးသော ကြီးထွားမှုနှင့် ဖွံ့ဖြိုးမှုတို့ကို ရရှိစေခြင်း
(4)Others (*explain*)အခြား(*ရှင်းပြပါ*)_____
_____
(999)☐Don't know မသိပါ။

CLINICAL EXAM ဆေးဘက်ဆိုင်ရာ စစ်ဆေးချက်

38. Within this month, has **this child** been ill? ဤကလေး ယခုလအတွင်းတွင် နေမကောင်းဖြစ်ခဲ့ဖူးသလား၊
(1)☐Yes ဖြစ်ခဲ့ပါသည် (2)☐No မဖြစ်ခဲ့ပါ (999)☐Don't know မသိပါ။

38a. If YES, was the illness serious? (e.g., malaria, acute diarrhea, pneumonia, had to go to clinic...) အကယ်၍ နေမကောင်းဖြစ်ခဲ့သည်ဟု ဆိုပါက၊ အပြင်းအထန်နာမကျန်းဖြစ်ပါသလား၊(ဥပမာ-ငှက်ဖျား၊ အကြီးအကျယ်ဝမ်းသွားခြင်း၊အဆုပ်ရောင်ခြင်း၊ ဆေးရုံဆေးခန်းသွားရခဲ့ခြင်း။)
(1)☐Yes အပြင်းအထန်နာမကျန်းဖြစ်ခဲ့ပါသည် (2)☐No အပြင်းအထန်မဖြစ်ပါ (999)☐Don't know မသိပါ။

39. Angular Stomatitis *(Both sides)* (နှစ်ဘက်စလုံး) ကျီးကန်းပါးစပ်နာဖြစ်ပါသလား။
(1)☐Yes ကျီးကန်းပါးစပ်နာ ဖြစ်ပါသည် (2)☐No မဖြစ်ပါ

WEIGHT, HEIGHT & MUAC ကိုယ်အလေးချိန်၊ အရပ်အမြင့်နှင့် လက်မောင်းအလယ်လုံးပတ်တိုင်းခြင်း

40. Weight of child ကလေး၏ ကိုယ်အလေးချိန် _____ kg ကီလိုဂရမ်

(1) ☐Used floor scale ကြမ်းပြင်တွင် ချိန်ရသော အတိုင်းအတာကို အသုံးပြုခဲ့သည်။

(998)☐Unable to measure တိုင်းတာမရပါ။

41. Height / Length of child ကလေး၏ အရပ်အမြင့်/အရှည် _____ cm စင်တီမီတာ

(998)☐Unable to measure တိုင်းတာ၍မရပါ။ **(If Unable to measure, go to no. 42)**

41a. Child measured: တိုင်းတာခဲ့သောကလေး

(1)☐Lying down လဲလျောင်းလျက်အနေအထား (2)☐Standing up မတ်တပ်ရပ်လျက်အနေအထား

42. MUAC လက်မောင်းအလယ်လုံးပတ်တိုင်းခြင်း _____ cm (998)☐ Unable to measure တိုင်းတာ၍မရပါ။
(Measure on child's left arm ကလေး၏ ဘယ်ဘက်လက်မောင်းကို တိုင်းပါ.)

43. Does **this child** have a disability? ဤကလေးတွင် ခန္ဓာကိုယ်မသန်စွမ်းမှု တစ်ခုခုရှိနေပါသလား။

(1)☐Yes ရှိပါသည် (2)☐No မရှိပါ (999)☐Don't know မသိပါ။

43a. **If Yes**, what is the disability? *(Ask the caretaker for their common word.)* အကယ်၍ မသန်စွမ်းဟုဆိုခဲ့လျှင်၊ မသန်စွမ်းသော အခြေအနေကို ဖေါ်ပြပေးပါ*(ကလေး အုပ်ထိန်းသူကို ရိုးရိုးစကားလုံးဖြင့် မေးပါ)*။

REFERRAL အမှတ်ပေးခြင်းနှင့် လွှဲပြောင်းခြင်း

44. Weight-for-height z-score *(Refer to WHO table for z -score & referral - use ≤1.5 for home visit & follow up.)*
အရပ်အမြင့်အတွက်ကိုယ်အလေးချိန် z-*score* အမှတ် (ကမ္ဘာ့ကျန်းမာရေးအဖွဲ့ချုပ် WHO ဇယားပါ z-*score* အမှတ် ကိုယူပြီး လွှဲပြောင်းပေးပါ- ၁.၅ အောက် (သို့မဟုတ်) ၁.၅တည့်တည်တွင် ရှိနေပါက အိမ်သို့သွားရောက်လည်ပတ်ခြင်းနှင့် နောက်ဆက်တွဲ လုပ်ငန်းများကို ဆောင်ရွက်ရန် လွှဲပြောင်းပေးပါ။)

(1) ☐<-3 ☐Referred to TFP TFP အစီအစဉ်သို့ လွှဲပြောင်းပေးပါ။ ☐No referral as already enrolled စာရင်းဝင်ပြီးသားဖြစ်လျှင် လွှဲပြောင်းပေးရန်မလိုပါ။

(2) ☐<-2 ☐Referred to SFP SFP အစီအစဉ်သို့ လွှဲပြောင်းပေးပါ။ ☐No referral as already enrolled စာရင်းဝင်ပြီးသားဖြစ်လျှင် လွှဲပြောင်းပေးရန်မလိုပါ။

(3) ☐-2 to ≤-1.5 ☐Referred to CHE/CHW လူထုရပ်ရွာကျန်းမာရေးပညာပေး/လူထုရပ်ရွာကျန်းမာရေးလုပ်သားသို့ လွှဲပြောင်းပေးပါ။

(4) ☐>-1.5 ☐No referral လွှဲပြောင်းပေးရန်မလိုပါ။

(998)☐Unable to measure တိုင်းတာ၍မရပါ။

45. MUAC လက်မောင်းအလယ်လုံးပတ်တိုင်းခြင်း

(1) ☐<11.5 cm ☐Referred to TFP TFP အစီအစဉ်သို့ လွှဲပြောင်းပေးပါ။ ☐No referral as already enrolled စာရင်းဝင်ပြီးသားဖြစ်လျှင် လွှဲပြောင်းပေးရန်မလိုပါ။

(2) ☐≥11.5 cm to <12.5 cm ☐Referred to SFP SFP အစီအစဉ်သို့ လွှဲပြောင်းပေးပါ။ ☐No referral as already enrolled စာရင်းဝင်ပြီးသားဖြစ်လျှင် လွှဲပြောင်းပေးရန်မလိုပါ။

(3) ☐≥12.5 ☐No referral လွှဲပြောင်းပေးရန်မလိုပါ။

(998)☐Unable to measure တိုင်းတာ၍မရပါ။