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Contributing Factors for Low Consumption of Animal Food Among Children Aged 6-23 Months in Alive and Thrive Intervention Areas of Bangladesh

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ACRONYMS

AED	Academy for Educational Development
AM	Area Manager
A&T	Alive & Thrive
BF	Breastfeeding
BM	Branch Manager
BMI	Breast Milk Initiation
CF	Complementary Feeding
BHNPP	BRAC Health Nutrition and Population Programme
EBF	Exclusive Breastfeeding
FGD	Focus Group Discussion
HSC	Higher Secondary Certificate
HH	Household
IYCF	Infant and Young Child Feeding
PO	Program Organizer
PK	*Pusti Kormi*
RED	Research and Evaluation Division
SS	*Shasthya Shebika*
SSC	Secondary School Certificate
SK	*Shasthya Kormi*
UZ	*Upazila*

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ABSTRACT

Introduction: In Bangladesh about two-thirds of total food consumption is rice as main staple food, especially for the poor, in addition to some vegetables, pulses and small quantities of fish, meat, egg, etc. if and when available. The similar dietary pattern and practices were found for under-two children in the intervention areas of Alive and Thrive (A&T) project where mothers were counseled on appropriate complementary feeding practice as a component of Infant and Young Child Feeding (IYCF). BRAC-RED intended to explore these issues to recognize the gaps that might be addressed to increase the consumption of protein from animal foods among the children through the IYCF interventions in A&T areas.

Objective: This study aims to identify the barriers leading to low consumption of animal foods by children aged 6-23 months in A & T intervention areas; and to assess their knowledge and practices of dietary intake through 24-hour recall.

Methods: Mixed methods were chosen to find comprehensive information in 12 *upazilas*, 3 from each of Barguna, Sylhet, Chittagong and Dinajpur districts. The *Pusti Kormi (*PK)*,Shasthya Shebika* (SS)*,* and mothers/caregivers enrolled in the A&T intervention areas were selected for interview; and those who had involvement in providing the services. In addition, other programme staff from the supervisory level who involved in providing services was also interviewed.

Findings: The study revealed from the quantitative findings that, in intervention areas intake from animal sources was 7-12g at 1 years and 18g at 2 years where the recommended dietary average (RDA) was 14g for less than one years and 16g for less than 2 years. On the other hand in control areas at both age groups the intake ratio was lower. From the qualitative findings majors contributing factors for feeding from animal sources was, lack of knowledge, lack of awareness on protein deficiency, barriers from the family members, myth, etc. Almost similar barriers was found from the quantitative findings like; financial crisis (80.3%), mothers lack of knowledge and awareness (67%), unavailability of the products in near local market (5%), etc.

Conclusion: Food consumption from animal sources might be increased among less than two years children by reducing those barriers, by strengthening efforts in the awareness development process in creating demand for appropriate IYCF services at household level especially intake foods from animal sources to improve children's nutritional status.

INTRODUCTION

The diet of most of the population in Bangladesh is mainly the cereals-based staples. About two-thirds of the total consumption is rice along with vegetables, pulses and small amount of fish, if available. The similar pattern of dietary practice was found in the Alive and Thrive (A&T) intervention areas where mothers were counseled on appropriate complementary feeding practices as a component of Infant and Young Child Feeding (IYCF) practices. It was observed that most of the mothers/caregivers fed their children with less diversified food even after counseling by health volunteers. The monitoring report of A&T programme of BRAC reveals that the average consumption of foods particularly from animal sources was very low in the intervention areas. Animal foods are the major source of quality protein and essential micronutrients, namely iron, zinc, etc. Fish, especially small fish, is one of the important animal food sources that supplies protein and micronutrients with high bioavailability. Children may become stunted if they do not receive adequate quantities of quality complementary foods after 6 months of age.

It was estimated that around 6% of under-five deaths can be prevented by ensuring optimal complementary feeding (Ahmed *et al*. 2005). Therefore, it is crucial to explore the reason behind low consumption rate of animal foods as sources of quality protein among the children in A&T intervention areas. Gaps might be present in-terms of knowledge, perception and practice of the mothers or the volunteers delivering services in the intervention areas, or might be other way around, for instance, the financial insufficiency of the households to buy animal foods, etc. Proteins are composed of amino acids that mainly work as the major source of building body muscle and other tissues. In addition, it plays vital role in producing hormones, enzymes, hemoglobin, including sparing action for energy; however, for energy sources it's not the prime mover (WHO/FAO 1990). Deficiency of protein develops chronic under nutrition and affects the children most in achieving the normal growth and development (Lemon 1995).

BRAC-RED intends to identify the gaps that might hinder the animal food consumption of the children in different areas of A&T even after having intensive IYCF counseling.

OBJECTIVE

This study aims to identify the barriers leading to low consumption of animal foods by children aged 6-23 months in A & T intervention areas

SPECIFIC OBJECTIVES

1) To assess the dietary intake of the children aged 6-23 months through 24-hour dietary recall
2) To identify the specific barriers prohibit the mothers to provide animal foods in the complementary food to their children
3) To explore the knowledge and perception of the mothers/caregivers regarding the importance of animal food consumption in complementary feeding practice
4) To explore the knowledge of the SSs/PKs regarding the importance of animal foods in complementary feeding practice
5) To provide finding-based recommendations to improve complementary feeding practices.

METHODS

STUDY DESIGN

Both quantitative and qualitative methods were adapted to collect data.

STUDY POPULATION

At the delivery level, SSs and PKs were selected as the respondents, who basically work as frontline healthcare providers to deliver the IYCF services under the A&T programme. In addition, *upazila* managers (UM), branch managers (BM), and programme organizers (PO) were also interviewed to know their views. At the recipient level, mothers or caregivers and fathers of the children were selected as the respondents.

ELIGIBILITY

Inclusion criteria:

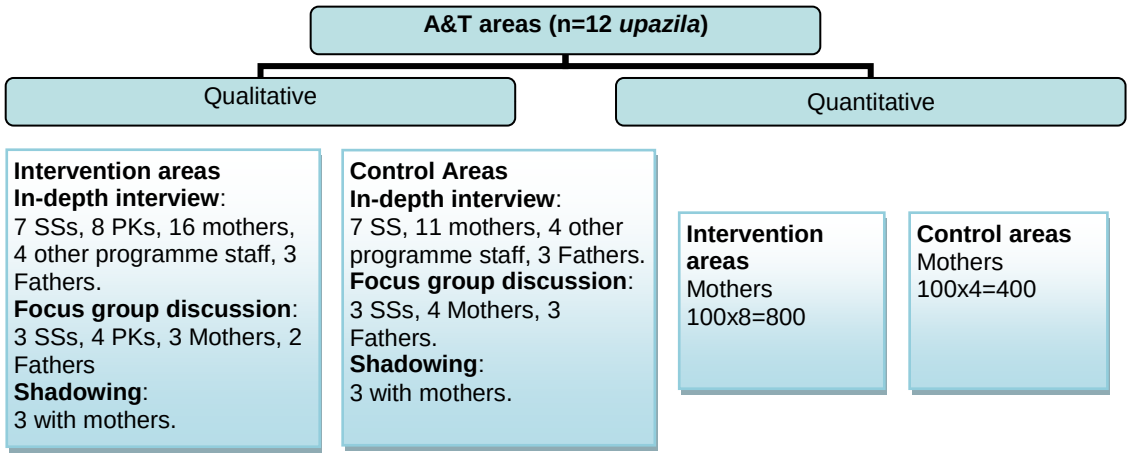
- Mothers having children aged 6-23 months
- SSs/PKs/other programme staff of BRAC working in the selected areas

Exclusion criteria:

- Those who were visibly ill and/or uncomfortable to participate in the study
- Mothers having no children aged 6-23 months

Study site and sample

Twelve *upazilas* from four districts (Dinajpur, Sylhet, Chittagong, and Barguna) were selected using random cluster sampling method. The intervention areas were selected where A&T supported health programmes as well as others BRAC health programmes were operating. The control areas were selected where other BRAC health programmes were operating except A&T programme. Study populations were selected randomly in such a way so that each district contains one control and two intervention *upazilas*.



Sample size selection procedure

The following formula was applied for sample size estimation.

$n = Z^2pq/d^2$

$= (1.96)^2(0.5)(0.5)/ (0.05)^2$

$= 384.16 = 384$ or approximately 400

Where

n = required sample size

Z = confidence limit set at 1.96 which corresponds to 95%

p = the estimated prevalence of relation between the maternal socioeconomic status and the outcome of the newborn

q = 1-p = 1- 0.5 = 0.5

d = degree of accuracy desired, usually set at 5% (0.05)

Multistage procedure for sample size selection was applied and the approximate sample made double to avoid precession error. So, the total sample would be 800 (400 X 2) for the eight intervention areas and half of it i.e., 400 from four areas were selected as control.

Simple random sampling was followed for entire stages to select mothers/caregivers, like

Selected *upazilas* ⟶ SSs ⟶ Mothers

Selected 12 *upazilas* ⟶ 10 SSs (each *upazila*) ⟶ 10 Mothers (each SS)

TOOLS OF THE STUDY

A pre-tested structured questionnaire was used to collect information on dietary intake, performance of SSs/PKs on complementary feeding, counseling, etc. To explore the knowledge and perceptions of the mothers as well as SSs, semi-structured questionnaires were used to conduct in-depth interview, shadowing, and focus group discussions (FGD). Thematic analysis plan was used for qualitative data analysis by expert anthropologist.

In-depth interviews covered the following topics:

- Socioeconomic status of the key informants
- Service delivery by SSs and PKs in their catchment HHs (other sources of information)
- Perception and practices on animal food consumption
- Perceived barriers on animal food consumption and coping mechanisms
- Unmet need to increase the animal consumption, if any

The following themes were selected for conducting FGDs

- Socioeconomic status of the respondents
- Influencing factors of animal food consumption
- Existing barriers to perform and practice, probable coping mechanism

Shadowing with mothers covered the following topics:

- Practices of mothers on providing food to children from animal sources
- By a daylong observation barriers from the family members tried to identified
- Mothers knowledge, perception and practices

DATA COLLECTION

Twenty-five enumerators were recruited to collect quantitative information. They got 5 days of intensive training on data collection including 24-hour dietary recall method, 3-day dietary diversity, and other necessary information. To measure the amount of household food consumed a set of standard measuring cups and spoon was provided to them. Each enumerator collected data from four households every day. On the other hand, eight anthropologists were recruited to collect the qualitative data and conduct in-depth interviews, FGDs, and shadowing.

DATA ANALYSIS

The qualitative analysis was performed using the thematic analysis plan. Quantitative data analysis was done using SPSS version 17. Household 24 hour dietary recall method was used to obtain the amount of food consumed by children, based on the dishes and ingredients. The ingredients were collected by details on the family or local amount, which were then converted into grams for convenience in different nutrient calculation, especially the protein consumption. The household member who was responsible for preparing food and feeding children was interviewed to obtain information on food consumption over the past 24 hours. Besides, a 3-day recall method was followed to know the status of dietary diversity of the under-two children.

ETHICAL ISSUES

Informed consent was taken from the respondents for conducting the interviews. Adequate care was taken for maintaining confidentiality.

LIMITATIONS

Fathers' in-depth and FGDs could not be conducted in Barguna district due to their unavailability. During visit, they went to the sea for fishing for their livelihood.

FINDINGS

SOCIOECONOMIC PROFILE OF THE RESPONDENTS

A total number of 1200 households were included in the study of which 800 were from intervention and the rest 400 from control areas. The study population was 6207 of which 4129 and 2078 were respectively from intervention and control areas. About 42% of the household members were in reproductive age group (20 – 45 years). The population distribution by age groups was similar irrespective of the intervention and control areas (Table 1). Among the entire household the female members were about 52%. It was found that 40% had primary education (I-V), about 35% had secondary and higher level while 25% of the population had no schooling. It is noted that children below 7 years were excluded from the analysis for school education. The respondents were largely Muslim (95%). Almost all the mothers were involved with the household chores rather than involving with any income generating activities (IGA). Among the male members fewer were engaged with farming (about 9%), business (9%), service (5%), and other IGAs (41%) like daily wage labourer, begging, retired, tuitions, student, etc. Nearly half of the household members were involved with IGA and about 52% had monthly income within the range of Tk. 5,001-10,000 (Table 1).

Table 1. Socio-demographic profile of HHs by study areas (%)

Study variables	Study areas		
	Intervention	Control	All
Age in years			
< 2	19.9	19.9	19.9
2 - <5	4.2	3.9	4.1
5 - 9	10.9	10.9	10.9
10 - 19	11.6	11.7	11.6
20 – 45	41.1	42.8	41.8
46 and above	12.1	10.7	11.7
Total	4129	2078	6207
Sex			
Male	48.2	48.7	48.3
Female	51.8	51.3	51.7
Total	4129	2078	6207
Have school education			
No schooling	24.3	27.5	25.3
Primary (I-V)	40.6	38.6	40.0
Secondary and above	35.1	33.9	34.7
Total	2943	1464	4407
Religion			
Muslim	93.3	94.5	93.5
Non-Muslim	7.0	5.5	6.5
Total	800	400	1200
Occupation			
Farming	9.8	5.8	8.5
Business	9.1	9.2	9.1
Services	3.7	7.4	4.9
House wife	37.0	35.1	36.4
Others	40.3	42.5	41.1
Total	3028	1506	4534

(Table 1 continued...)

(... continued Table 1)

Study variables	Study areas		
	Intervention	Control	All
HH monthly income (Tk.)			
≤5000	16.9	16.2	16.6
5001-10000	50.2	54.4	51.6
10001-20000	26.3	21.4	24.7
20001+	6.6	8.0	7.1
Total	800	400	1200

From the qualitative part, we found that mothers' average age was 26 years, while fathers' average age was 34, PKs 29, SSs 39, and the other programme staff 30 years old. Among the respondents, educational status of the mothers was mostly primary level passed. Fathers were mostly at secondary level, where some mothers and fathers were found to be illiterate. Among the programme staff most of the PKs were HSC (grade XII) passed where some were SSC (grade X) and the other staff were graduate. Among the respondents majority were Muslim.

MOTHERS' KNOWLEDGE ABOUT COMPLIMENTARY FEEDING

Most of the mothers in intervention (93%) and control (90%) areas opined that the starting age of complementary feeding is after 6 months which is appropriate according to the WHO guidelines and recommendation (Table 2). The rest 8% from both the areas mentioned that the age of starting complementary feeding is before 6 months. From the intervention areas, 24% of the mothers preferred cereals-based food like suji, rice, bread, etc, as the complementary food for their children, while 22% preferred vegetables followed by fish and egg (15%). Preference on meat, liver, milk and milk products, fruits, etc., was low (9%). Responses for all those types of foods were closer in the control areas except milk and milk products.

Mothers from control areas preferred milk and milk products more (11%) compared to the intervention areas (9%). According to the mothers' opinion reasons to prefer complementary foods were largely due to insufficient breast milk before 6 months of age from both interventions (84%) and control areas (88%). Few mothers from intervention areas (4%) mentioned about the additional nutrient requirement after 6 months of age. Other reasons as mentioned were, maintaining good health, cognitive development, making the children familiar with semi solid foods, etc.

Table 2. Mothers knowledge status on complementary feeding (%)

	Programme areas		
	Intervention	Control	All
Awareness on complimentary food starting			
Before 6 month	7.12	9.75	8
After 6 month	92.88	90.25	92
Preference type of food for complimentary feeding			
Cereals (rice/bread/suji)	23.85	24.00	23.9
Fish	15.45	14.4	15.1
Eggs	14.4	13.8	14.2
Meat/liver	8.55	6.9	8.0
Milk and milk product	8.7	10.8	9.4
Vegetables	21.75	21.3	21.6
Fruits	7.65	7.2	7.5
Others	0.3	0.3	0.3

(Table 2 continued...)

(... continued Table 2)

	Programme areas		
	Intervention	Control	All
Reasons for choose that type of food			
Breast milk not sufficient	83.55	87.6	84.9
For maintaining good health	2.7	2.1	2.5
Cognitive development	0.3	0.3	0.3
To met nutritional need	3.6	2.1	3.1
Make the children familiar with complementary food	1.5	2.1	1.7
Due to some other reasons	9.15	4.2	7.5
Frequency of complimentary feeding			
3 times/day	88.0	78.75	84.92
More than 3 times/day	12.0	21.25	15.08
N	800	400	1200

From the qualitative part we found that, in the intervention areas of Chittagong and Dinajpur several mothers said that after the age of six months they provided complementary foods to their children. On the other hand, several mothers from Sylhet informed that they would also start complementary food after ten months. In Sylhet we found most of the Hindu families delayed to start complementary food due to their '*Annoprashon**' ritual. The situations in control areas were a bit worse than the intervention areas. A mother from Dinajpur said…

> *"Before 6 months of age we provided honey and cow's milk if the child was crying. She provided her child a biscuit at morning, then rice with egg and some banana, in noon time rice with vegetables, in the afternoon serelac (infant formula), and at night only breast milk."*

In the case of age-specific food, majority of the mothers in the intervention areas were enabled to mention about the quantity of food, because they knew from the A&T programme and got a measuring bowl to feed their babies appropriately, but in the control areas the mothers and even the health workers couldn't mention it properly. The reasons for providing complementary feeding (CF) were mainly for cognitive development and get proper nutrition by the intervention areas and reduce stunting by the control areas. For CF they mainly preferred rice, vegetables, egg and fish. Shadowing in Dinajpur found that the mothers did not have any first food for their children.

A mother (Dinajpur control area) knew well about complementary feeding, though she started it before 6 months due to insufficient of breast milk. She tried to feed the child different fruits available in HH, egg, fish from own sources. And tried to feed responsively. But she tried several times to feed the baby. This made the baby less appetite.

MOTHER'S KNOWLEDGE AND PERCEPTION ON PROVIDING FOOD FROM ANIMAL SOURCES

Among the respondents vast majority (90.4%) had awareness and knowledge on animal foods as rich sources of protein (Table 3). Rests of them were found to be aware with lack of confidence, means they knew the fact but had some confusion. Mostly they preferred fish (28.3%) then eggs (24%) in all areas. The preferences for meat were 20%, milk 18% and liver 9%. Negligible differences were observed in perception of mothers between intervention and control areas.

The reason for choosing such animal sources was mainly for maintaining good health of the children (Table 3), which was 62% in intervention and 57% in control areas. Some of the mothers (25%) emphasized those animal foods to build good physical and mental health of their children. Little number of the respondents agreed for animal sources to protect the children from diseases. Only 0.6% of the mothers felt the necessity of foods from animal sources to meet nutrients need and cognitive development.

In the case of frequency of having those animal sources for the children, most of the mothers responded for average 3 times per day and rest mentioned for once a day.

Table 3. Mothers knowledge status on animal food (%)

	Programme areas		
	Intervention	Control	All
Awareness on animal food			
Yes	95.4	80.4	90.4
No	0.45	0.9	0.6
Little bit know	4.35	18.3	9.0
Preference type of Animal sources			
Fish	28.35	28.2	28.3
Eggs	24.45	23.4	24.1
Milk	17.85	19.2	18.3
Meat	20.85	18.9	20.2
Liver	9.45	8.1	9.1
Reasons for choose that type of food			
To build good physical and mental health	27.0	21.9	25.3
Protect from disease	13.5	11.7	12.9
For maintaining good health	62.25	57.3	60.6
To met nutritional need	0.75	0.3	0.6
Cognitive development	0.6	0.3	0.6
Frequency of animal food			
Average per day	4.22	8.7	2.84
Average per week	10.14	20.07	6.74
N	800	400	1200

From the qualitative part, it was found that majority of the mothers, except Barguna, mentioned that the starting time for giving animal foods to children was after 6 months of age, whereas mothers from control areas stated that it was 10 months. As per PKs, SSs and mothers information the babies were fed animal foods three times per day while it was once per day in the control areas as the mothers stated. Importance of animal food was well known to almost all the PKs.

They emphasized on its importance on child health; it was necessary for their physical and mental health, cognitive development, nutrient intake specially protein, increasing immunity and decreasing anaemia, and keeping them well. On the other hand, few mothers and SSs from Sylhet and Dinajpur intervention areas and SSs and mothers from Barguna, Dinajpur and Chittagong control areas mentioned the matter slightly.

While asked for the sources of knowledge and information, PKs and SSs mentioned about the training, refresher meeting, book, media, own experience, and so on, but vast majority of the mothers from Sylhet mentioned PKs name. Whereas, very

few mothers from others areas told that PKs and TV/radio were the sources of their knowledge. From the shadowing, it was found that mothers were influenced by their mother-in-laws and other family members of the household. They knew the matter from the A&T staff but could not apply that knowledge for their ancestors. So, they avoided mentioning any of the sources of knowledge they acquired.

In Dinajpur intervention area, from shadowing with mother we found that the she did not know the effect of shop food. She and her family members preferred biscuit, lichi jam (artificial litchi candy), cerelacs, chocolate, noodles, etc. to feed their babies. Mothers took rice with pulses to feed the baby in the morning, and for the whole day she tried to feed that rice for 3/4 times, which the child refused again and again. During shadowing the PK and SS came to the mother and showed what and how to feed their babies. They also advised on feeding from animal sources and not to feed from shop. While we interviewed that mother we found that she actually did not knew the matter before.

We also tried to find out mothers' perception on animal food (Table 4). More than two third (67%) of the mothers responded that they felt to provide food to the children from animal sources, while they started complementary feeding. Rest of the mothers did not feel like that. The mothers perceived the need to feed animal foods to keep their children well (29%). The other reasons for providing animal foods as mentioned were for proper growth (22%), to meet nutrient (21%) requirements, for cognitive development (17%), etc.

The findings reveal that the perception of the mothers from control areas was worst. Despite knowing usefulness of the animal foods/protein the mothers also mentioned some impairment of consuming those. About 49% mother pointed out that the children could not digest animal foods. Some mentioned that children could not chew these foods properly (28%) and they did not like to eat. Some myths were identified that consumption of animal foods might be the cause of stomach problem, worm, etc., and a narrow difference existed between two groups.

Table 4. Mothers' perception on animal food (%)

	Programme areas		
	Intervention	Control	All
Perceived in need to fed from animal source			
Yes	66.5	0.3	66.8
No	33.0	0.2	33.2
Perceived usefulness of animal food			
For proper growth	22.95	21.0	22.3
Protect from disease	10.65	7.5	9.6
Keep children well	29.85	27.3	29.0
Cognitive development	18.75	14.7	17.4
To met nutrition need	21.9	20.1	21.3
Others	0.45	0.3	0.4
Perceived impairment of animal food			
Children can't digest	52.2	42.0	48.8
Children can't chew it	27.9	27.9	27.9
Family members forbid	10.5	6.9	9.3
Myths (stomach problem, causes of worm, etc.)	6.9	28.2	14.0

BARRIERS FOR ANIMAL FOOD CONSUMPTION

Around one-fourth (27%) respondents told that they faced difficulties to feed their children from animal sources (Table 5). Most of them mentioned that the main barrier

was financial, 83% from intervention and 78% from control areas. The other contributing factors were lower supply of animal foods in nearby markets (11%), food from animal sources was not available (5%), family members specially in-laws and husbands prohibited the caregivers to feed foods from animal sources (3%), and also sometimes obstacles came from neighbours and relatives.

They tried to overcome those barriers by themselves, like arranging funds from other sources (46%) and rearing cow, hen, duck, etc. (26%), to overcome financial barriers, discussing with their family members (13%), and reducing other expenses to enhance expenditures for the children (12%). The rest did not try anything.

Table 5. Barriers to feed animal food (%)

	Intervention	Control	All
Yes, often	23.4	33.9	26.9
Not at all	72.45	61.5	68.8
Sometimes	4.35	4.2	4.3
Type of barriers			
Financial	82.6	78.0	80.3
From family members	2.7	2.1	2.5
From relatives and neighbour	2.0	0	2.0
Low supply in near market	11.4	6.0	9.6
Animal sources not available	5.4	3.3	4.7
Others	1.05	0.6	0.9
Initiative taken to met the barriers			
Started own cattle/goat/hen/duck etc. raring	25.8	25.8	25.8
Discuss with family to solve	13.5	13.2	13.4
Lower other expenses to increase expenses for child	10.8	13.8	11.8
Consult with A&T staff/doctor	2.7	0	1.8
Tried for another sources of income	36.9	63.6	45.8
Nothing	1.8	3.6	2.4

From the qualitative part, we came to know some barriers from mothers and also from the programme staff. An *upazila* manager form Barguna mentioned that,

> *The situation in control areas was worst for getting food from animal sources. He thought that most common barriers to intake animal food were lack of finance and education, myths, religious beliefs, and lack of motivation and knowledge. He suggested providing more manpower and creating opportunity to build a comprehensive IYCF practices.*

ECONOMIC BARRIERS

In the intervention area of Sylhet, majority of mothers faced financial problem due to their husbands' ignorance. Their husbands either worked in London (UK) or engaged in business, and they preferred formula foods or other infant formula rather than having animal foods in complementary feeding.

In Chittagong and Dinajpur, several mothers mentioned that due to limited income, they could not buy fish and meat regularly but they provided at least an egg per week while most of the PKs and SSs in intervention areas informed the similar problem. A SK from Dinajpur mentioned,

> *Mothers at least try to feed one boiled egg if her husband was unable to buy animal food. She observed that mothers would like to provide foods influenced by TV, but*

currently they were concerned and understood the importance of breast milk and providing animal foods in complementary feeding to children after their counseling. In her catchment area, people had no financial problem, but most of the mothers faced problems with their family members, especially the elderly ones. In such situation, at first we had counseling with the family members and increased their awareness.

In the control areas majority of mothers' notion was to provide animal foods despite of income limitations. They opined that income problem was temporary and its solution depended on one's husband's ability or willingness; if earning increased they could provide more animal food to their children.

SOCIAL BARRIERS

It was found that in Dinajpur intervention areas mothers and PKs encountered some superstitions imposed by their neighbours regarding feeding fish and meat to their children. They prohibited feeding food from animal sources to children, because they believed it would be harmful to the baby. The family members supported and influenced as well not to provide those foods to the baby.

DOMESTIC BARRIERS

Majority of the mothers from both intervention and control areas stated that they faced problem from their elderly family members. They tried to practice the traditional way for their grand children and forbidden feeding foods from animal sources that might cause worm, stomach problem, etc. A mother from Dinajpur said,

Sometimes I could not provide fish to the child, though there was enough fish supply at home. Most of the time fish cause dysentery, so, I was rather not interested to give it to my child."

If the mothers fed animal foods ignoring their elderly family members' advice and the children had any health problem then the family members blamed them. So, they scared to follow the health workers' advice. A mother from Chittagong told,

They could not provide fish and meat even more food to the babies. If the baby became sick, then everybody would blame her.

SOME ALLEGORY

In Chittagong intervention area few mothers said that they could not provide egg which caused diarrhoea. Also allegory existed on feeding liver. A mother said,

If they feed chicken liver then children's liver will be smaller and grow up as cowardice. On the other hand, as they belief that a baby cannot digest egg and similar food, these may be the causes of diarrhoea.

Most of the PKs of Sylhet and Chittagong told that mothers believed that fish was harmful for children and caused worm. If they were fed more fish then the baby's belly would be enlarged. So, they could not provide animal food.

OTHERS BARRIERS

In control areas, intake of animal food was found to be insufficient due to lack of knowledge. Most of the PKs from Sylhet and Chittagong stated that Hindu ritual *Annoprashon* was the most important to decrease intake of animal food as complementary due to most of the Hindu family could not break their rituals, for that

they delayed for starting complementary food due to some financial crisis, delayed decision to performed the ritual by the household head or his absent from home, etc. As results delayed starting for complementary food also delayed for adding food from animal sources later. In some cases, lack of mother's knowledge hindered intake of animal foods. Others were too busy with the HH chores that they did not get enough time to feed their babies. On the other hand, as they thought that due to providing animal food children defecated more, the mothers and family members got afraid and stopped feeding animal foods.

Some mothers reported that due to providing animal foods like egg and meat to their children they faced some allergenic problem. In that case, they avoided all kinds of animal foods. Most of the health providers also mentioned that mothers complained that after giving animal food their children faced vomiting and worm problems.

The health providers tried to counsel mothers and also the family members that the problem did not due to feeding animal foods, there might be some other reasons. Religious restriction was found in some areas where male POs were not allowed for supervision or counseling. On the other hand, in some areas fathers were idle/ workless and even not thought about family planning, as a result they failed to provide enough animal food to their children.

From shadowing it was found that, the restrictions mostly came from husbands and relatives. In Barguna, husbands went for long period to work outside and returned home with lots of shop foods for their children and preferred to feed that. On the other hand, relatives also preferred to feed shop foods to their children while looking after them due to their mothers' HH chores. If any mother forbidden them, they did not care and sometimes might get angry. For that, most of the time, mothers didn't told anything. The mothers who had their own sources of animal food, mostly preferred fish, egg (intervention areas) and milk products (in control areas).

It was found in most the areas that mothers forgot to wash babies' and own hands with soap properly during feeding their children. As a result, the baby might have stomach problem or vomiting. The elderly and other family members including relatives suspected that it occurred due to feeding animal food. Then the mothers also believed them and frighten to feed the animal food again.

CHILDREN'S FOOD CONSUMPTION PRACTICES

Information on children's food intake was collected from the mothers/caregivers through 24-hour dietary recall method. Table 6 indicates the average per capita per day food intake. It was found that total average food intake was higher in intervention areas (258g/capita/day) compared to the counterpart in control areas (230 g/capita/day). Among the foods, cereal consumption was higher about 60 g. Average intake of milk and milk products was 57 g while it was higher (65 g) in the control areas compared to the intervention (52 g). Intake of food from animal sources was not at satisfactory level in both intervention and control areas. Among the animal foods, it was found that only milk and milk product were consumed highest compared to others such as fish intake was 32 g, meat 28 g, and egg 33 g. Intake of milk and milk products seemed to be higher, which might be due to inclusion of those foods where more or less milk was used as an ingredient, for example *Payesh,* major ingredient was rice but it was recorded in this group.

Children's average energy intakes were 550 and 468 Cal/capita/day in intervention and control areas respectively, of which >80% came from the plant sources. The energy came largely from cereals because most of the under-two children were fed *suji* with milk and *khichuri*, and the rest came from egg, milk and milk products, pulses, etc. Among the children protein intake was on average 14 g/capita/day. The amount between intervention and control areas was almost same. The child got around half of protein from the animal food sources.

Through shadowing a mother in Sylhet control area, we found that she preferred to give breast milk to her child at the age of 10 months than providing complementary food. During whole day observation, we found that she fed mostly *semai* (vermicelli with milk) and breast milk while the child cried. And for once (at 11 am) she tried for hotchpotch (made by rice, pulse, vegetables) to the child.

Table 6. Average food, energy and protein intake by children of 24-hour dietary recall

	Amount of food intake g/capita/day		
	Intervention (mean)	Control (mean)	All (mean)
Cereal, rice	62.0	53.48	59.17
Pulses	6.85	4.12	5.94
Total vegetables	42.61	30.90	38.70
Roots and tubers	22.76	16.83	20.77
Leafy vegetables	11.13	7.37	9.89
Non-leafy vegetables	8.72	6.69	8.04
Animal sources	89.25	89.64	89.43
Fish	18.80	12.18	16.58
Meat/Liver	5.16	4.67	4.99
Egg	12.83	7.56	11.06
Milk & milk product	52.46	65.24	56.80
Fruits	28.63	25.88	27.73
Oils/fat	11.0	7.13	9.70
Other*	18.02	18.70	18.23
Total	258.35	229.85	248.66
Total energy	550.11	467.97	522.32
(Cal/capita/day)	452.65	382.14	428.72
Plant sources	97.46	85.83	93.60
Animal sources			
Total Protein	14.68	11.83	13.71
(gm/capita/day)	7.45	6.13	6.99
Plant sources	7.23	5.70	6.72
Animal sources			

* Other includes soft drink, some shop food, honey, sweet meat, sabu, etc.

Information on animal food intake at the HH level is presented in Table 7 to have an idea of its consumption status. It was found that 31% of the total HHs consumed fish frequently, it was better in intervention areas (34%) compared to that in control areas (29%). The other animal food sources were egg (25%), milk and milk products (18%), meat (17%), etc. Rest of the respondents seldom consumed food from animal sources. Overall, the consumption status of the intervention areas was much better than those of control.

Table 7. Percentage of households consumed animal foods

	Intervention (n=800)	Control (n=400)	All (N=1200)
Food items			
Fish	34.2	29.1	30.5
Meat	18.0	16.2	17.4
Egg	26.25	23.4	25.2
Milk and milk product	17.85	19.4	18.4
Liver	5.1	5.4	5.1

Among different age group of children, the mean per capita daily intakes of energy and other nutrients were higher in intervention areas compared to those in control areas in relation to the recommended dietary allowances (RDA) (Table-8). Average energy intake was estimated to be higher among all the age groups in the intervention areas. Mean calcium intake was highest (253 mg) among children aged 12-23 months in intervention areas and it was 207 mg in the same age group of controls. Gap between calcium intake and RDA was increased as the age group of the children decreased. Iron intake was 2 mg among the lowest age group (6 – 8 months) children in control areas compared to that in any other age groups irrespective of areas, but all the age groups' iron consumption was inadequate in relation to the RDA. Protein intake was high in intervention areas among the children, like 18 mg in the age group 12-23 months, which also higher than the RDA, 13 mg among 9-11 months, and 8 mg among 6-8 months. The situation of control areas was similar to the intervention areas. On the other hand intake of vitamin A and C contained food was higher compared to RDA amount.

Table 8. Children's mean per capita daily intake of energy and other nutrients by age groups

	RDA*	6 - 8 months (Mean)		9 - 11 months(Mean)		RDA*	12 - 23 months(Mean)	
	(<1 years)	Intervention (n=156)	Control (n=76)	Intervention (n=204)	Control (n=71)	(1-3 years)	Intervention (n=440)	Control (n=253)
Amount of food (g)	-	151.0	137.93	220.78	196.93	-	314.23	266.43
Energy (Cal.)	820	310.0	258.59	490.75	406.35	1360	663.32	547.61
CHO (g)	-	42.4	39.55	65.27	59.54	-	98.12	82.49
Protein (g)	14	7.91	5.72	12.91	9.74	16	18.22	14.33
Fat (gm)	-	11.38	8.31	17.47	13.72	-	20.40	15.34
Vitamin A (µg)	300	317.32	186.36	498.46	311.69	250	596.23	425.99
Vitamin B1 (mg)	0.3	0.18	0.12	0.29	0.17	0.5	0.39	0.35
Vitamin B2 (mg)	0.5	0.19	0.18	0.34	0.22	0.8	0.42	0.35
Vitamin C (mg)	20	13.71	8.11	24.11	19.27	20	35.01	32.52
Iron (mg)	5	3.27	1.96	6.11	3.97	10	7.33	6.34
Calcium (mg)	500	126.17	96.16	200.51	146.46	600	253.92	207.38

*WHO (1974). Handbook on human nutritional requirement.
*HKI & WFP (1988). Tables of nutrient composition of Bangladeshi foods.

Figure 1. Protein intake pattern comparison with Food and Nutrition Board, Institute of Medicine recommendation

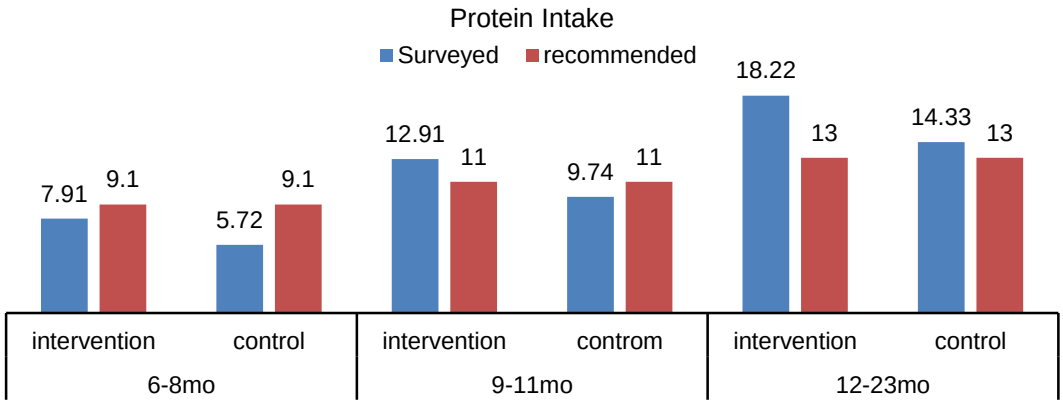


Figure 1 indicates that protein intake was lower than the recommendation in both intervention and control areas among children aged 6-9 months. While, as the children became older, protein consumption was increased compared to the recommendation except the age group of 9-11 months in control areas. But protein consumption in the intervention areas was better in all age groups compared to those in the control areas.

HOUSEHOLDS' FOOD PREFERENCES FOR CHILDREN

The food sources for children were mostly preferred from family pot (70%) by the household members (Table 9) because it was hygienic (36%) and full of nutrients (32%). Besides, homemade food was liked by the children and these were low cost (15%). One-fourth of the respondents agreed that they also preferred food from shop (25%) for their children because; children liked it as they said (50%).

Here the ratio was found to be higher in control areas (38%). Preferences for packaged and formula foods were around 3% each between the areas. The reason to choose food except homemade were easily accessible, readily available in the nearby market (25%), easy to prepare and feed the children (19%), nutritious (6%), and also family members asked to feed those food.

Table 9. Households preference to different food sources for the children (%)

	Intervention (n=800)	Control (n=400)	All (N=1200)
To feed the children the most preference source of food			
Fed from family pot	70.2	69.9	70.1
Fed packet food	2.25	2.7	2.5
Food from Shop	18.6	37.8	25.0
Children formula	2.1	3.0	2.4
Reasons behind choose food from family pot			
Low of cost	14.55	17.7	15.6
Safe and hygiene	37.8	33.3	36.3
Less chilly/spices liked by the children	14.4	17.7	15.5
Full of nutrient	33.0	30.3	32.1
Keep children healthy by decreased diseases	0.6	0.3	0.5

(Table 9 continued...)

(... continued Table 9)

	Intervention (n=800)	Control (n=400)	All (N=1200)
Reasons behind choose food from outside for the children			
Easy to prepared for feeding	16.2	24.9	19.1
Children's like it	38.1	72.9	49.7
Easy accessible and available to market	19.8	36.0	25.2
Nutrient	3.3	10.2	5.6
Family members asked for	0.45	0.3	0.4

From the shadowing part (Parbatipur, Dinajpur), it was found that mothers and their family members preferred to provide foods from shop rather than the family pots. The elderly family members did not create any problem for feeding food from animal sources, but they preferred shop food.

While shadowing in Sylhet Sadar, it was found that due to her engagement with HH chores the mother could not make time to feed her child, and it seemed that child feeding was her responsibility. No one helped the mother in HH chores or feeding the baby. Hence, the family members preferred packet foods from shop which was easy to prepare and feed.

Shadowing with a mother in Sylhet control area found that the child was given biscuits in the morning then *cerelac* (infant formula). At 11 a.m. she gave a boiled egg to the child. At noon rice with red leafy vegetables was served to the child, which the family members did not encourage to feed. Noodles were given to the baby in the evening and *cerelac* at night.

Table-10 shows that all the respondents in intervention areas provided foods from animal sources to their children whether small or large in quantity mostly were from their own sources (92%), but others had no pet (8%) to make provision. Most mothers from the control areas fed their children food from animal sources (91%); mostly got it from their own pet sources (77%). The rest of the respondents did not provide any animal food to their children, but they were very few.

Table 10. Provided **animal foods to the children from own sources (%)**

	Consume animal food	Sources	
		Own sources	Not own sources (other)
Intervention (n=800)	100.0	91.65	8.35
Control (n=400)	90.6	77.1	13.5

Dietary diversity score for the children categorized into different age groups like 6-8 months, 9-11 months and 12-23 months according to the A&T strategy. This categorization was done following WHO guideline (2009), which was found appropriate to counsel for appropriate IYCF practices. Dietary diversity score was averaged from three days' recall of food intake by the children. It was found that very few children (average 0.3) were fed only rice among all age groups that might be due to sickness.

Table 11 presents the provision of diversified foods for the children of different age groups. In Intervention areas among the 6-8 months age group children, mostly consumed from 5 food groups (around 28.8%) or all food groups (28.8%) and in control areas this age group children consumed from all food group (around 29%) per day. In those cases, it was found that those age group children consumed mostly cereals with pulse and vegetables; pulse, vegetables and fish/egg; suji with egg and milk; etc. These ingredients were mostly used for *khichuri* or *suji*. Among the 9-11 and 12-23 months age group children in intervention areas, regularly consumed food from

all groups (48%), where in control areas only 12-23 months age group children were taken food from all groups (49%). Table 11 shows that most of the children, irrespective of intervention and control areas, had cereals and other three groups or more indicting dietary diversification during the survey period. Dietary diversification was found to be improved as age of the children increased. Varieties of food consumption might not improve nutrient adequacies until ensured the required quantity.

Table 11. Providing of diversified food for the children by age group (%)*

	6-8 month		9-11 month		12-23 month	
	Intervention	Control	Intervention	Control	Intervention	Control
Only cereals	0	2.6	1.0	0	0	0.4
Cereals plus any 1 group	1.9	5.3	0.5	0	0.2	0.8
Cereals plus any 2 groups	5.1	13.2	1.5	1.4	0.5	1.2
Cereals plus any 3 groups	12.2	13.2	8.3	4.2	4.5	6.3
Cereals plus any 4 groups	28.8	23.7	23.5	16.9	16.4	15.8
Cereals plus any 5 groups	23.1	13.2	30.4	36.6	30.7	26.1
Cereals plus all groups	28.8	28.9	34.8	40.8	47.7	49.4
Total (N=1200)	(n=156)	(n=76)	(n=204)	(n=71)	(n=440)	(n=253)

Table 12 shows, from three days' average, the percentage and number of meals intake by the children. Among the households the intake of cereals among children was 100%. Among the children intake of vegetables (92%) was higher next to cereals.

Table 12. Percentage and frequency of different food items intake by children (three days' average)

	Intervention		Control		All	
	Children (%)	Meals (Nos.)	Children (%)	Meals (Nos.)	Children (%)	Meals (Nos.)
Cereals	100	2.50	100	2.35	100	2.45
Vegetables (leafy & non-leafy, fiber)	92.61	1.38	90.59	1.40	91.94	1.39
Fruits	75.79	1.04	74.55	1.05	75.38	1.04
Fish	84.20	1.16	75.57	1.02	81.32	1.12
Cow's meat	14.65	0.66	18.07	0.59	15.79	0.63
Chicken meat	24.71	0.62	20.87	0.54	23.43	0.60
Goat's meat	2.29	0.48	0.76	0.66	1.78	0.50
Liver (all type)	25.35	0.52	30.28	0.47	26.99	0.50
Egg	73.38	0.74	59.03	0.66	68.59	0.71
Milk	49.29	1.20	56.23	1.28	51.61	1.23
Sweet & milk product	21.02	0.96	22.14	0.97	21.39	0.96
Molasses	27.52	1.06	41.48	1.19	32.17	1.12
Legumes	71.97	1.01	67.94	0.97	70.63	1.00
Fats & oils	96.31	2.16	93.13	1.92	95.24	2.08

From intake of foods from different animal sources we found that mostly children's consumed more in numbers among the study areas but the frequent of intake was lower. Children from intervention areas consumed fish (84%) compared to that in the control areas (75%). Intake of beef (18%), all types of liver (30%), milk (56%) was pretty higher in control areas. On the other hand, consumption of chicken (25%), mutton (2%) and egg (73%) were much higher in intervention areas. Consumption of sweet and milk products was almost same in both areas.

Table 13 shows the age-specific intake of different meals per day, averaged from last three days. The children aged 6-8 months were mostly fed cereals based food like *suji*, rice, *ruti*, bread, etc. and vegetables, milk and milk products, sweets, molasses, legumes, oil and fat. Fish was mostly included after the 9 months of age. Some fruits were added for the age group 12-23 months. Among all the age groups, the rest of the food was introduced but in very low quantity. It is apparent from the Table 13 that dietary diversification was there but might not be at satisfactory level due to less prioritizing of food from animal sources, which they were counseled according to the A&T programme guideline.

Table 13. No. of meals/day (Averaged from last 3 days) of different food groups by children of different age groups

	6-8 month (mean)		9-11 month (mean)		12-23 month (mean)	
	Intervention (n=153)	Control (n=71)	Intervention (n=199)	Control (n=71)	Intervention (n=433)	Control (n=251)
Cereals	2.04	1.81	2.50	2.27	2.66	2.52
Vegetables (leafy & non-leafy, fiber)	1.36	1.00	1.39	1.29	1.39	1.52
Fruits	0.89	0.89	0.99	0.96	1.10	1.12
Fish	0.98	0.78	1.16	1.04	1.21	1.06
Cow's meat	0.75	0.46	0.64	0.43	0.66	0.62
Chicken meat	0.56	0.77	0.57	0.51	0.64	0.54
Goat's meat	0.33	0.00	0.33	0.00	0.51	0.66
Liver (all type)	0.54	0.44	0.57	0.55	0.48	0.45
Egg	0.65	0.64	0.77	0.63	0.75	0.68
Milk	1.15	1.34	1.16	1.37	1.23	1.24
Sweet & milk product	1.11	1.12	0.98	0.95	0.91	0.95
Molasses	1.44	1.45	1.03	1.21	0.97	1.10
Legumes	1.04	0.94	1.05	0.96±	0.98	0.98
Fats & oils	1.80	1.44	2.17	1.81	2.26	2.05

Figure 2 shows that at different HH income level, food consumption from animal sources for the under-two children varied. The consumption of animal food was high in the income group of Tk. 5,000-10,000. On the other hand, the HH with income of more than Tk. 20,000 per month consumed lower amount of food from animal sources. It indicates that income had minimum influence on consumption of animal foods. Among the entire group we found small number of respondents who agreed that they did not take food from animal sources.

Figure 2. Consumption of food from animal sources considering different HH income level

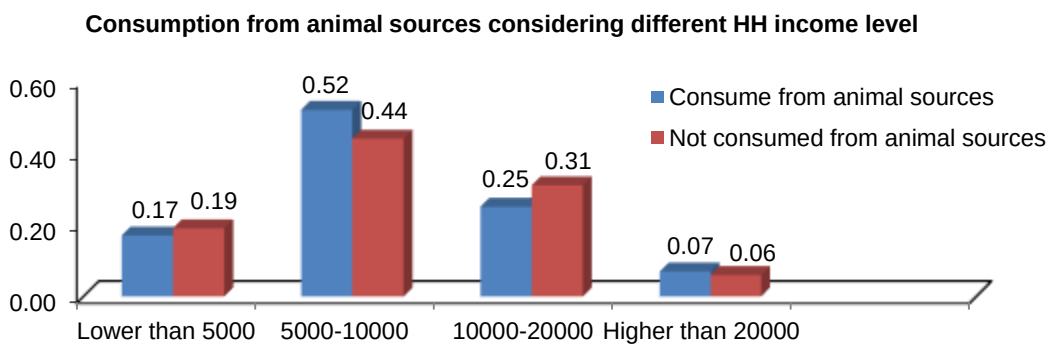
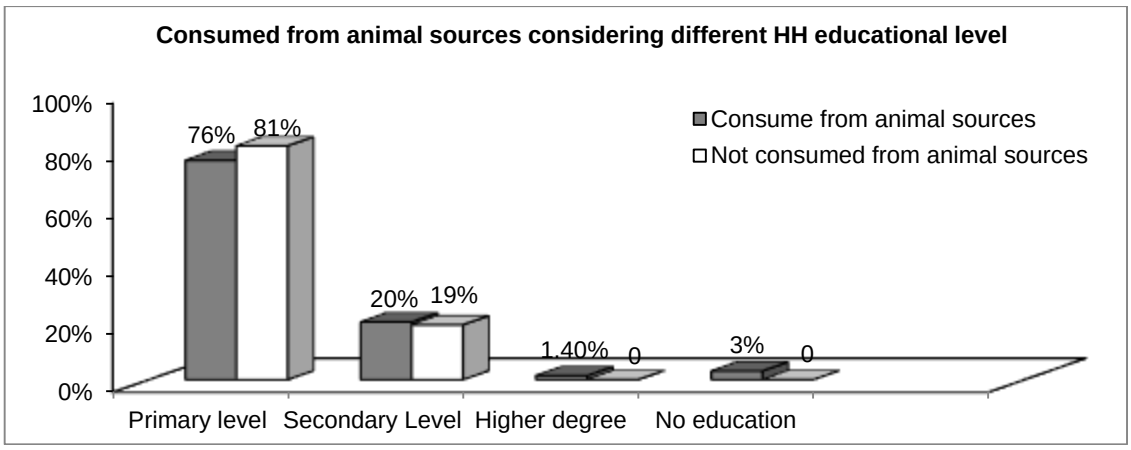


Figure 3 shows that more mothers having primary level education fed their children from animal sources compared to those passed HSC and above. On the other hand, the proportion of mothers with no education and higher education is almost similar in consuming very low amount of foods from animal sources. If mothers are not empowered in their household for decision making even after having education and knowledge, it doesn't make any difference from those mother who are not having education and knowledge. Or it may be other way around, like, even if mother had education, they didn't have adequate knowledge on the importance of animal food inclusion in their children's menu.

Figure 3. Food consumption from animal sources by educational level



DISCUSSION

Food is the main factor contributing to children's physical growth, cognitive development and overall health improvement. Dietary intakes among children in the study areas were found to be diversified, but the food was basically cereal i.e., rice dependent. Consumption of food was not at satisfactory level. This indicates that the diet might be of better quality, but the quantity was compromised. Food consumption from animal sources was seemed to be lower in the age group 6-8 months compared to other age groups. It is reflected in the individual nutrient intakes. Food intakes in the intervention areas were better compared to the control areas, but the gap was narrow.

Animal foods are the main sources of quality protein required to make its provision in complementary diet for the child. Among the respondents, the main animal food sources for the child were meat/liver, fish and egg. The ratio of these to meet protein requirement was 17%, although protein's bioavailability from animal-based food is higher. But the contributions of other sources like fish, meat/liver, and egg were 5%, 6% and 4% respectively. The children consumed 14% protein from animal sources and rest came from plant sources. Bioavailability of protein from animal sources is higher compared to that of plant sources due to its limiting amino acids (FAO/WHO 1990).

Food items like rice, vegetable, eggs provided to the children were from own sources and domestic products. Other items like meat, fish, milk, edible oil, pulse, etc. procured from local market might compromise quantity. Therefore, dietary diversity could meet nutrient requirements, but due to limitation in quantity might hinder nutrient availability.

Inadequate amount of food consumption as sources of macro-nutrients[1] reflected similar deficiencies (Frayn 1995). By the Food Consumption Score (FCS), according to the frequency of consumption of eight food groups, we calculated a weighted score that consumed by the children for three consecutive days. It was found that food such as cereals, vegetables, and pulses only provided more energy to the children aged below 8 months, though pulses are considered as good source of plant protein complementary to that of cereal. Protein-rich foods such as milk, meat, eggs, and fish, which also contain micro-nutrients (calcium, iron, zinc, etc.), are given the highest value category (Dewey *et al.* 1996; Young *et al.* 1991; Reds *et al.* 2000).

In general, the reasons behind the contributing factors for low consumption of animal food were lack of purchasing power, price hike of food, lack of knowledge, barriers from family like local myths and sometimes for some ritual. The barriers differed by regions. In Dinajpur, people had money but they were less interested to provide food to the children from animal sources. In Chittagong, the elderly members of the family preferred traditional IYCF practices, and also fathers were less likely to involve with income generating activities. The similar beliefs were found in Sylhet. On the other hand, in Sylhet due to more migrants, specially from London, people faced high price of commodity in the local market. The poor people failed to buy beyond their limitation. Both intervention and control groups faced the problem of health service

[1] Macro-nutrient are those nutrient which need more in quantity for the body which are carbohydrate, protein and fat.

providers, especially POs supervising the PKs and SSs. The religious barriers restricted in allowing male POs to counsel the family.

In control areas, consumption of milk and milk products - primarily cereal-based foods cooked with milk like vermicelli, *suji*, etc. - were higher compared to other food groups. They mostly preferred shop foods like *cerelac* (formula baby food), which were readily available and easy to prepare. In some places in intervention areas, mothers were yet to be aware about the importance of animal foods and disadvantages of processed foods. In addition, motivational activities need to be strengthened in favour of providing animal foods as complementary to the children instead of shop/processed foods that might cause of appetite loss or sickness.

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

In conclusion, it can be said that dietary diversification in the study areas was found to be noticeable in terms of quality, but quantity was inadequate that hindered nutrient adequacy, specially protein and micronutrients from animal sources. Traditional practices, myth and taboos, prohibition of elderly family members, fathers, etc. still remained as barriers in providing animal foods to children as weaning and supplementary food. Efforts to be strengthened in the awareness development process in creating demand for IYCF services at household level to improve children's nutritional status.

RECOMMENDATIONS

1. Special attention should be given in providing food from animal sources to children aged 6-8 months and to be continued until customized to family foods.
2. Awareness building among family members needs to be strengthened about the importance of providing food from animal sources in children's complementary feeding, and the consequences of protein deficiency at the early childhood.
3. Traditional practices, myth and taboos, misconception and prohibition of elderly family members, fathers, etc. still remained as barriers in providing animal foods to children at weaning and supplementary stage. Initiatives need to be taken to minimize these barriers by more counseling, forum, meeting with the family members.
4. Supervision needs to be strengthened; involvement of female POs instead of males would be more useful.

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Annex A

Contributing factors for low consumption of animal food among the children aged 6-23 months in selected areas of Bangladesh
Bangla Check list for in-depth interview (PKs, SSs, Mothers and Fathers)

Date: ----------District: ----------*Upazila*: ----------Union: ----------Village: ----------

অবগতিক্রমে সম্মতি

(তথ্যগ্রহণকারীঃ নিম্মোক্ত তথ্য সূচারূরুপে তথ্য দানকারীকে অবগত করুন এবং তার অবগতিক্রমে সম্মতি নিয়ে সাক্ষাৎকার শুরু করুন)

ব্র্যাক অত্র এলাকায় একটি গবেষণা কাজ শুরু করতে যাচ্ছে। আমাদের লক্ষ্য হল ৬ মাস থেকে ২৩ মাসের বাচ্চা আছে এমন সব পরিবারে গিয়ে তাদের খানার জনসংখ্যা, সামাজিক, স্বাস্থ্য ও পুষ্টি বিষয়ক তথ্য সংগ্রহ করা। আপনারা যে সব তথ্য আমাদেরকে দেবেন সে সব তথ্য কেবল মাত্র আমাদের গবেষণার কাজে ব্যবহার করা হবে এবং তথ্যের গোপনীয়তা রক্ষা করা হবে। গবেষণা কাজে আপনারা সম্মত থাকলে এই সম্মতি পত্রে আপনাকে স্বাক্ষর/টিপসই দেওয়ার অনুরোধ করা যাচ্ছে। আপনারা আমাদের প্রশ্নের উত্তর দিতে বাধ্য নন এবং চাইলে তথ্য সংগ্রহ করার যে কোন সময়ে তথ্য প্রদানে অসম্মতি জানাতে পারেন।

আমরা কি আপনাদের সম্মতিক্রমে তথ্য সংগ্রহ শুরু করতে পারি ?

হ্যাঁ	না

ক্রমিক নং.	তথ্যপ্রদানকারীর নাম	বয়স (বছর)	বৈবাহিক অবস্থা	শিক্ষা	সহযোগী পেশা	আয়-মাসে	বাচ্চার সংখ্যা	ব্র্যাকে চাকরির বয়স		স্বাক্ষর
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