RESPONDING TO THE 'MIRACLE FOOD' STORY

In response to The Daily Star report titled 'Miracle Food made in Bangladesh', published on June 9, 2015, the Bangladesh Breastfeeding Foundation expressed some reservations regarding the Ready-to-Use-Therapeutic Food (RUTF) formulated by Icddr,b. Here we publish the full text of Bangladesh Breastfeeding Foundation's reaction along with the response of Icddr,b. We also welcome any other views on this issue.

Misleading parents on managing child malnutrition

DR. S.K. ROY *and* PROF. MQ-K TALUKDER

THIS is a reaction to the news report titled 'Miracle food made in Bangladesh' published on June 9, 2015 in *The Daily Star*. This news was culminated from Icddr,b's scientific symposium and based on the false propaganda of Dr. Tahmeed team on the unnecessary research and their recommendation to treat children with severe acute malnutrition (SAM) with Ready-To-Use-Therapeutic food (RUTF) made with locally available ingredients.

In terms of mortality, from the data of National Nutrition Programme (NNP) of Bangladesh, it is found that 10 percent of children under five died from severe wasting (<-3WHZ) or very low weight while 36 percent of children died as a result of being severely underweight (<-3WAZ). Results also showed that compared to normal children, mortality risk was 3.4 times higher among severely wasted children while the risk was 3.8 times higher among the severely underweight children. Thus evidence proves that much more attention is needed for the 'severely underweight' children beside SAM children.

RUTF is high-energy food, where energy comes mostly from fat. 60 percent fat is an abnormal composition for a diet. This will accumulate fat in the body very quickly which will distort the growth of the child, a threat for the standard growth of the child.

It is to be mentioned that Icddr,b's RUTF is prepared based on the formula of pushti packet of the National Nutrition Programme of Bangladesh in 1995. The formula of pushti packet is a mixture of rice powder, lentil powder, molasses and oil. Adding powder milk and micronutrients in the same formula and naming and promoting this mixture as 'Sharnali-1 and 2 (local RUTF)' is misleading the parents and nutrition implementers.

An article at the Cochrane Review 2013 revealed that there is no difference between RUTF and any local food as home treatment for severely malnourished children, or between RUTF given in different daily amounts or with different ingredients. The Cochrane database could not determine the scientific effects of RUTF. The study recommends that the decisions should be based on availability, cost and practicality of a country. Therefore, RUTF or any other production of food based on such principles (high fat, high energy) is not required for the children of Bangladesh.

RUTF is the worst threat to child health and nutrition. Commercialisation is bound to be an inevitable result of the production and introduction of RUTF. Moreover, at present, while the Bangladesh Government is making efforts to prevent the marketing of infant foods, powder milk for children under five, adding powder milk in the formula of local RUTF is encouraging the use of powder milk in the country.

The children of the most disadvantaged, poor families will fall victim to the greedy multinationals which produce and market powder milk as a substitute to mother's milk. Impoverished mothers who assume that RUTF will help their children recover their lost health will buy this product even though these are expensive and thus, can only be used in small amounts.

We condemn the article calling it 'miracle food', as it is a tricky promotion of the product in the mass media. It is also in violation of the new BMS Act 2013 of Bangladesh which strictly prohibits such commercialised packaged infant food production and its promotion. We should never compromise with such an industrial and commercial approach to tackle child health and malnutrition.

We are accountable to the future scientific community and the future generations. The claim that 600,000 under five children are suffering from SAM and are targeted for RUTF use is an exaggerated one. According to recognised statistics, this number is no more than 300,000.

Special efforts are needed for all severely malnourished children of Bangladesh (not just SAMs). Regular intake of homemade food is the best way to ensure immediate and long term solutions in tackling any stage of child malnutrition.

Moreover, management of SAM is possible through local, homemade foods within a short period. There are many publications in national and international journals from Bangladesh on this issue. IYCF Strategy of the Government of Bangladesh encourages nutrition rehabilitation of any kind of malnutrition using traditional homemade recipes made from local ingredients, such as *payesh, buter halua, dimer halua, firni, khichuri* etc with increased frequency.

The Honourable Prime Minister of Bangladesh has launched the Bangla recipe book for young infants and children during the inaugural ceremony of World Breastfeeding Week 2014. The book, which contains 35 recipes which are scientifically and nutritionally sound for children, is now available in stores. These recipes were produced by a joint initiative of the Govt. of Bangladesh, BBF, FAO, USAID and European Union with acceptability in seven divisions of Bangladesh.

Dr. Umesh Kapil, Professor of Public Health Nutrition of All India Institute of Medical Sciences, New Delhi, an invitee of the scientific symposium in Icddr,b, presented a scientific lecture against the promotion of local RUTF.

In his presentation, he shared that RUTFs are not accepted under the policies of the Government of India (2008), under the RCH or the ICDS, and shipment of imported RUTF is not accepted in India. We should also make such a policy in Bangladesh.

Ensuring Infant and Young Child Feeding (IYCF) strategy, policy and practice for all children of Bangladesh will provide the appropriate and correct solution for severe malnutrition of children. The GoB, development partners and NGOs should work together to strengthen IYCF activities throughout Bangladesh and not look for a 'quick-fix'.

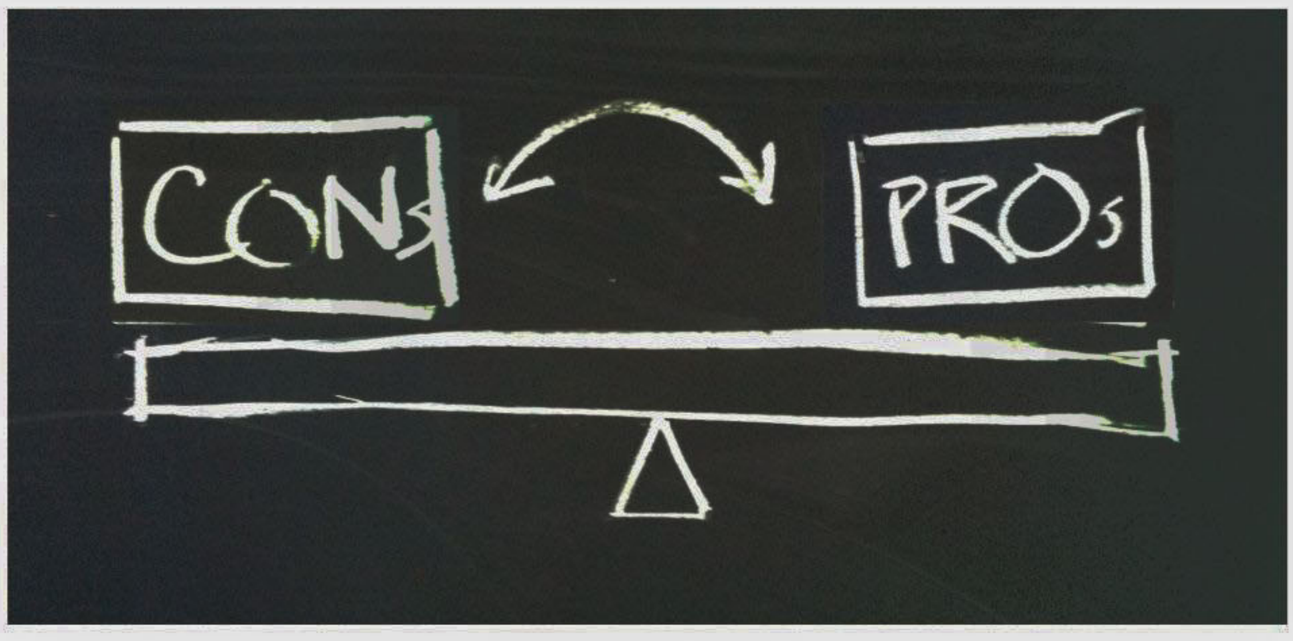
The writers are Senior Scientist & Chairperson of the Board of Trustees, Bangladesh Breastfeeding Foundation, and Adviser, Bangladesh Breastfeeding Foundation, respectively.

No scope for deception
Icddr,b responds

AS a matter of fact, we have not carried out any 'propaganda'; we simply informed everyone about the results of our scientifically designed and conducted research. We simply presented our study results.This research was essential because there is a need for an appropriate local solution to this huge problem. Otherwise, the research would not have been approved and advised by the international Scientific Advisory Group that consisted of eminent nutritionists Prof Alan Jackson, Prof Ann Hill, Dr Marco Kerac, Dr Beatrice Amadi, Prof George Fuchs and Prof Umesh Kapil of India.

The source of the data that "mortality risk was 3.8 times higher among the severely underweight children" when compared to the risk being "3.4 times higher among severely wasted children" is unknown. This is at least not drawn from any paper published in an international peer-reviewed journal. The risk of death among children with SAM that we cite to be 10 compared to healthy peers is from Black et al, Lancet 2008.

Children with SAM are grossly depleted in fat. For appropriate nutritional recovery, the international recommendation is to provide a diet that has less than 60 percent of energy coming from fat. The Government of Bangladesh's national guideline on community-based management of acute malnutrition recommends a diet for SAM that should contain fat providing 45-60 percent of total energy. This high amount of energy coming from fat is not abnormal for children with SAM.



Pushti packet is different in composition compared to Sharnali-1 and Sharnali-2. Pushti packet was not efficient in taking care of children with severe underweight. That is why it is not being used now in the national program of Bangladesh.

The review is based on four studies, three poorly designed, as mentioned by the review authors. All studies are done in Malawi, three by the same team. Despite the flaws, the Cochrane Review found the following: 1) When comparing RUTF with standard diet (flour porridge) in three quasi-randomised cluster trials (n = 599), RUTF improves recovery (risk ratio (RR) 1.32; 95% confidence interval (CI) 1.16 to 1.50; 2) Standard RUTF is better than RUTF with low protein.

As per international specifications, animal source protein is a must for treating children with SAM. Therefore, it has to be included in RUTF. Powder milk is the most reasonable choice although research is currently under-way to compare RUTFs containing milk powder and soy protein.

The national guidelines on community-based management of acute malnutrition (CMAM) published by the Government of Bangladesh in 2011 recommends 'Nutritional Treatment' for the management of SAM. The Nutritional Treatment is another name given for RUTF. The composition of Nutritional Treatment as mentioned in the GOB guideline is essentially the same as that of RUTF.

Sharnali-1 and Sharnali-2 are not breast milk substitutes. These are food-based treatment for SAM. They are NEVER meant for infants less than six-months old. So, the question of violating the Breast Milk Substitute Act 2013 does not arise.

There is no WHO documentation that says that RUTF using local foods is against the principles of WHO. Rather the WHO Updates on the Management of Infants and Children with SAM 2013, categorically mentions as 'implications for research' the following: 'What is the comparative efficacy (in terms of physiological, immunological and body composition recovery) and effectiveness of therapeutic foods made from locally produced food and ready-to-use therapeutic food for management of severe acute malnutrition of children in outpatient care?'

These diets are meant for treatment of SAM, never for healthy children. What ORS is for diarrhea, Sharnali-1 and Sharnali-2 are for treatment of SAM at home.

Sharnali-1 and Sharnali-2 are NOT infant foods. They are treatment diets and not breast milk substitutes. Therefore, the question of BMS Act 2013 violation does not arise.

With the population of Bangladesh being 149.8 million, 10 percent of the population is in the 6-59 months old age group, and prevalence of SAM as per BDHS 2011 is 4 percent, then there are 5,99,200 children with SAM in the country. If we consider the prevalence of SAM as 3 percent as per BDHS 2014, then we have 4,49,400 children with SAM. These figures will be more if we include young infants less than six-months old with SAM. Therefore, we are correct in saying that there are 500,000 to 600,000 children suffering from SAM. Even if we take the figure to be 300,000 as stated by Dr Roy and Dr Talukder, the number of children with SAM is very high in the country.

We agree that attention should be given to all malnourished children of the country, but priority should be given to those who are severely malnourished, and brought under treatment.

We have also developed a treatment protocol using khichuri, halwa and milk which we are using in our hospital successfully. However, these diets need to be prepared daily and may not be affordable by caregivers of children suffering from SAM. Indeed, children with SAM are much more likely to come from households that are extremely poor and also extremely food insecure.

These are nutritious diets for healthy children and taken as snacks. Payesh, firni also contain milk.

IYCF will certainly prevent SAM but may not be able to 'treat' a child who is already severely emaciated and suffering from SAM.

Prof Kapil did not say anything against Sharnali-1 and Sharnali-2, which are examples of the Government of Bangladesh recommended nutritional treatment or RUTF. Moreover, Prof Kapil is a member of the international scientific advisory committee that advises us on the development and testing of the diets.

Dr Tahmeed Ahmed, Dr. Md. Munirul Islam, Dr. Mustafa Mahfuz, Nuzhat Choudhury, Dr. Md. Iqbal Hossain, Dr. Sayeeda Huq and Dr. Md. Shafiqul Alam Sarker form the Study Team of Icddr, b.

QUOTABLE *Quote*

FAIZ AHMED FAIZ
(1911-1984)

Though tyrants may command that lamps be smashed in rooms where lovers are destined to meet, they cannot snuff out the moon, so today, nor tomorrow, no tyranny will succeed, no poison or torture make me bitter, if just one evening in prison can be so strangely sweet.

BEETLE BAILEY by Mort Walker

BABY BLUES by Rick Kirkman & Jerry Scott

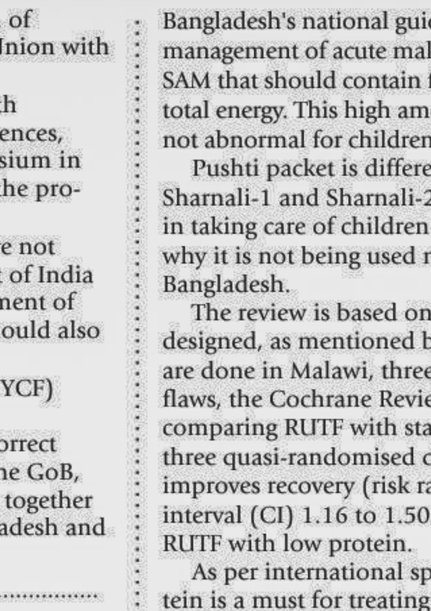
CROSSWORD BY THOMAS JOSEPH

ACROSS

1 Do a checkout chore
5 Aspirations
10 Sports spot
12 Hirsch of "Milk"
13 Plague
14 Tennis legend Rod
15 Antique auto
16 Ratify
18 Horrify
20 Sandy color
21 Some babies
23 Finished off
24 Pertness
26 Egypt divider
28 Evil
29 Narrow
31 Clean Water Act org
32 Show up
36 Inform
39 Wish undone
40 Away from the office
41 Mary's TV pal
43 Put up
44 Was partisan
45 Roping contest
46 Turn down

DOWN

1 Israeli native
2 Move furtively
3 Man of morals
4 Compass dir
5 Beatles movie
6 Poet Khayyam
7 Crucial
8 Raise
9 Calm
11 Speechless
17 Tissue layer
19 Crunch targets
22 Hidden gunmen
24 1972 Winter Games setting
25 Made suitable
27 Little devil
28 Pitch to the noggin
30 - Vegas
33 Undermine
34 "The Age of Anxiety" poet
35 All set
37 Sushi need
38 Fond of
42 Stashed



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Yesterday's answer

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D	O	N	E	■	A	S	P	I	R	E
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