EDITORIAL

LOOK FOR THE FLIES- THE FUTURE AHEAD!

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Food adulteration with various poisonous chemicals has reached a dangerous level posing a serious health hazards in the country. Every few years, we suffer, observe and make some movements on this evil act, and then we forget and forgive. So, where are we heading to? What is the future of our next generation if this devil is not contained? On the other hand, what is the fate of those who have already consumed adulterated food for most of the time in their life? - we rather say "The answer is blowing in the wind".

Food adulteration has many faces and in our country almost all are being explored& experienced. Use of various chemicals as preservatives, coloring agents, artificial ripening agents and many more are observed all around the country. Mostly we talk about using formalin as preservative in fish, meat and milk. A large amount of fishes are imported to our country from the neighboring countries like Myanmar.² The fish dealers use formalin at this transportation process in a view to keep them look fresh and prevent decomposition. Formalin is also being used in fruits to prevent decomposition and make them look attractive and fresh. A common observation by the consumers is, flies don't wonder around formalin mixed food items. Many of the fruits like mangoes, bananas, apple, grapes and litchis are now medicated with formalin. It's hard to find rotten fruits in fruit markets now-a-days. The hazard of using formalin affects both the food handlers and the consumers. It can cause irritation of eyes and skin while handling. Also, its inhalation can precipitate or aggravate asthma.3 Those who consume formalin mixed food items can suffer from kidney diseases, liver cirrhosis or cancer and respiratory illness. They also affect fertility of women and have profound effect on mental and physical growth of children. They are also responsible for blood cancers, anemia and nasopharyngeal cancer. Calcium carbides are used in artificial ripening of fruits which may lead to cancer of different organs like liver, kidney, skin, prostrate or lungs. They contain arsenic and phosphorus and cause gastro-intestinal disorders, vision impairment and irritation of throat, mouse and nose.⁵

Milk in our country is distributed as raw and pasteurized form. Addition of water can lead to poor nutrient quality and also put it to the risk of bacterial contamination. Hossain et al (2011) showed that most of the raw milk and few processed milk were adulterated with addition of water. ⁶ The entire sample was contaminated with bacteria at unacceptable level, regardless of its processing. Similar results were reflected on Chanda et al.(2012), but from their study we come to know that 10% of the milk were also adulterated with formalin and 20 % with sodium bicarbonate.⁷

Not only fish, meat, vegetables, fruits and milk; food adulteration is widely used in dry foods-and packed meals also. Our staple food rice is adulterated with urea to whiten them and the popular food item puffed rice (Moori) is also poisoned with this chemical. Urea is dangerous for kidney. Noodles, Chanachur and bakery items are also adulterated. Commercial fruit juices and spices are colored with carcinogenic agents like chrome, tartzine, and erythrosine. It has also been observed that brick dust is being used in chillipodwer, while saw dust in loose tea, soap in Ghee, and artificial sweetener, coal tar and textile dyes in sweetmeats are also used. Burnt engine oil is used to fry "Jilapi". Poisonous colouring agents like auramine, rhodomine, malachite green, allura red and Sudan red are applied on food items for coloring, brightness, and freshness; they can damage liver, kidney and can cause stomach, and bladder cancer. More than 76% food items on the market were found adulterated in a random survey by Public Health Laboratory of Dhaka City Corporation in 2004.⁵ A recent study by Institute of Food and Nutrition of Dhaka University has found that most of the consumable food items in Bangladesh contain cadmium, phosphorous and arsenic much more than the acceptable level.

Chemical substances or simply adulterants may be internationally added to substances to reduce manufacturing costs, or for some deceptive or malicious purpose. When profit in business is more important than morality, then it is possible to add the poisoning contents to the foods and beverages. Food adulteration, a clear violation of human rights, has crossed all limits now-a-days, as drive against this menace is neither effective nor regular in the country. Dishonest and unscrupulous businessmen are behind this crime against humanity. Food

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adulteration, synonymous with slow poisoning of the masses, is physical and intellectual genocide of the nation. Food adulteration is not a new concept in third world countries, but the dimension of the adulteration in Bangladesh is so massive that it would appear to be a shame on the civil society of Bangladesh.

Physicians of the country cannot keep silent in the war against food adulteration because they actually better know the health hazards of the adulteration. The professional societies should come forward supporting the civil society organizations sensitizing policy makers, awareness building within media on food safety issues and promoting food safety culture.

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References:

 Hossain Md. Visa Heinonen, and K. M. Islam. "Consumption of foods and foodstuffs processed with hazardous chemicals: a case study of Bangladesh. "International Journal of Consumer Studies 32.6 (2008): 588-595. Bangladesh depends on fish imports from Burma. Burma News International. 2011 April 10 [Cited on 2014 June 21] Available from: http:// www.bnionline.net/index.php/news/kaladan/ 10514-bangladesh-depends-on-fish-imports-fromburma.html

- 3. Kim, Ki-Hyun, Shamin Ara Jahan, and Jong-Tae Lee. "Exposure to formaldehyde and its potential human health hazards." Journal of Environmental Science and Health, Part C 29.4 (2011): 277-299.
- 4. Sajol Asfaq. Formalin in fruits can be fatal. Dhaka Tribune. 2013 15 June [updated 15 June 2013, cited 5 July 2014]. Available from: http://www.dhaka tribune.com/food/2013/jun/15/formalin-fruits-can-be-fatal
- Food adulteration rings alarm bell. The Daily Star. 2011 August 11 [cited on 2014 July 4]. Available from: http://archive.thedailystar.net/newDesign/ news-details.php?nid=198096
- Hossain, T. J., M. K. Alam, and D. Sikdar. "Chemical and Microbiological quality assessment of raw and processed liquid market milks of Bangladesh." Continental Journal of Food Science and Technology 5.2 (2011): 6-17.
- Chanda, T, et al. "Adulteration of raw milk in the rural areas of Barisal district of Bangladesh." Bangladesh Journal of Animal Science 41.2 (2013): 112-115.
- 8. Shastho jhukee shob rashayonik e, monozog shudhu formalin e (Focus is on formalin only, while every chemical has the health hazard). The Daily Prothomalo. 2014 July 2. Bengali version is available from: http://epaper.prothom-alo.com/index.php? opt=view&page=1 &date=2014-07-02.