MALNUTRITION AND MEAL SCHEME

Start breakfast scheme

The mid-day meal scheme does ensure one meal a day, but children on hungry stomach can hardly concentrate on their studies.

By Charan Singh and Sukhinder Kaur Cheema

The government is presenting first full year budget on February 28 after assuming power eight months ago. The economy is beginning to show green shoots and the international economic sentiments for India are also positive. The growth rate of the economy is anticipated to exceed that of China, and India could very well be the engine of growth for global economy.

To take advantage of the demographic trend in the Union Budget, the government could consider ensuring healthy diet for children and general population, especially young mothers. India is a country with most malnourished children in the world. One out of every three children is malnourished in India, and 50 per cent of all childhood deaths are due to malnourishment. Moreover, 46 per cent of all children below the age group of three are too small for their age. Malnourishment during pregnancy, lactation and after birth is responsible for small size of children.

Recent research has shown that malnourishment during the first 1000 days of life and small size at birth is the reason for lack of proper brain and eye development, and a higher risk of heart disease, diabetes, obesity and high blood pressure when the child grows up.

Although fats have been labelled as the culprit in heart disease and obesity, some types of fats are needed during pregnancy, breastfeeding and the early development of the child. These fats are known as the essential fats, meaning human body cannot make these fats thus we must consume these in our diet. Lack of these fats can lead to stunted growth, poor brain and eye development, and also cause asthma, allergies and skin diseases.

There are two types of essential fats, omega-6 and omega-3 fats; majority of the commonly consumed foods are high in omega-6 fats, however omega-3 fats are less consumed in our diet. Omega-3 fats are absolutely essential for brain and eye development; thus mothers during pregnancy need to consume these types of fats to provide to the fetus. Brain develops rapidly during the first two years of age and stores large amounts of fats, including omega-3 fats; thus lactating mothers also need to consume omega-3 fats in their diet as these fats are then passed to the growing child.

A lack of omega-3 fats in the brain cause poor memory, early onset of memory loss, Alzheimer’s disease, dementia and other functions of the brain. India has a high rate of suicide due to depression, and a lack of omega-3 fats in the diet could be a potential reason. There are research studies suggesting that 20 percent or more of the Indian population may be deficient in essential fat.

Strategies to tackle malnourishment have mostly focused on a deficiency of vitamins and minerals; it is about time to think of malnourishment of essential fats for better health of the Indian population. Although omega-3 fats are utmost important during development, these fats are also known to reduce the risk of heart disease, diabetes, obesity, asthma, allergies, certain types of cancer etc.

Vegetable oils such as corn, cottonseed, soy, sunflower, canola and peanut oil are good sources of omega-6 fats, while flaxseed (linseed), soy, canola and walnuts are a good source of omega-3 fats. Fish and marine foods, including sea weed are rich sources of omega-3 fats. Some of these foods containing both omega-3 and omega-6 type of fats must be made affordable for the general public to reduce future health care cost.

There is an urgent need for the new government to develop strategies on incorporating essential fats of both omega-6 and omega-3 in the diet of growing children, pregnant and lactating mother’s, while there should be a general focus on increasing the consumption of omega-3 fats to maintain proper health. This could be ensured by two-pronged strategy – enriching mid-day meal scheme and examining the list of food supplied through Food Corporation of India distributed across the country by more than 5 lakh fair price shops.

Prevalent malnutrition

The mid-day meal scheme (MMS), which initially started in 1992 in Madras, is serving to feed 11 crore children through nearly 7 lakh kitchen-cum-stores and 26 lakh cook-cum-helpers, spread across the country. Apart from well-known factors of ensuring higher school attendance, which was achieved, as documented by various studies, there was another important factor of improving nutritional status of children.

According to various studies, well documented, the malnutrition aspect has not been successfully achieved. Illustratively, the review of MMS in Andhra Pradesh in July 2013, revealed that in a sample of 950 children, nearly 56 per cent were malnourished while 35 per cent were under nourished. Most surprisingly, only 7 per cent of children were having normal body mass index. The factors ascribed to this surprising result was low intake of both calorie and protein foods mainly due to irregular and/or no breakfast, as was orally expressed by children.

The MMS does ensure one meal a day, but children on hungry stomach in the class rooms from morning can hardly concentrate on their studies. There are numerous international studies that establish the importance of breakfast in improving the nutritional status of the child. Even in India, a number of studies have established that missing breakfast is closely associated with malnutrition.

As discussed, malnutrition could lead to retarded growth, weakening of immune system, memory deficiency, reduced social skills and learning disabilities. Therefore, to take advantage of the young demographic population and to prepare the work force of future, it may be necessary to also consider breakfast schemes for children in schools and at better occasion than the first Union Budget for the new government.

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