

Importance of Nutrition for Female Population of Reproductive Age

Pages with reference to book, From 264 To 265

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Appropriate nutrition is necessary to maintain and improve the health of a nation. This becomes more important in the third world with millions of people born and brought up in poor homes with large families, inadequate food, education and medical care. A survey by Underwood et al. (1967) showed that 50 percent of Pakistani population was undernourished.

Women particularly in the child bearing age are specially vulnerable to malnutrition. Affluent women in this age group can also have poor nutritional status. In a recent study by Khan (1983) weights were found to be below the established standards (Jellifee, 1966) in 56 percent of female medical students. Women of child bearing age (Khan, 1981) from affluent families were comparatively, heavier and taller than the poorer women, the difference in height and weight being statistically significant. Poor women from larger families weighed less than those from smaller families. The height and weight of mothers of small-for-date babies was less than the mothers of average-birth new borns (Shariff et al., 1975). Poor nutritional status of mothers could therefore be responsible for intrauterine foetal growth retardation (Shariff et al., 1975; Donnelly et al., 1964).

Diet is probably among hereditary habits handed down from mother to daughter, from generation to generation and dietary habits are closely linked to socio-economic and regional groups. Information about the range of dietary intakes of the various nutrients in our community is insufficient. In a study on Pakistani women of child bearing age Khan (1981) found that they were living on diets sub-standard in almost every respect, e.g. in energy, animal protein, vitamin A, Vitamins B3 and C, and minerals, iron and calcium. The results also indicated inferior nutritional status of women from large families than those from smaller families. Similarly the daily diet of the mothers of the small-for-date children was not different from that of the normal women, but the intake of calorie, protein and iron of the mothers of small-for date children was significantly less than the mothers of average birth weight newborns (Shariff et al., 1975). This could be due to poverty, ignorance and taboos (Vijayalakshmi and Devaki, 1976).

The high incidence of anaemia in women during the reproductive years is related to inadequate intake of dietary iron to compensate losses, increased requirements of menstruation and pregnancy. In a study Rahnman and Khan (1972) found mild to moderate anaemia in 19 percent of Pakistani women of child bearing age. Among pregnant women frequency of anaemia was 62 to 64 percent (Akhtar, 1976; Hashnii et al., 1973). The anaemic subjects tended to have smaller babies, confirming that nutritional deficiency was responsible for low birth weight (Khan, 1964).

Alterations in the concentration of plasma proteins have been reported in pregnancy (Towler et al., 1976) and liver function tests are altered (McNair and Jaynes, 1960) thus, Khan (1974) found that the mean values of serum total protein, albumin, and albumin/globulin ratio were significantly lower and serum uric acid, icteric index, alkaline phosphatase, aldolase and total iron binding capacity were significantly higher in mothers than in the healthy non-pregnant women. Similar results have been reported by other investigators (Samad et al., 1979). Moreover, blood ascorbic acid values have also been found subnormal in a significant number of pregnant Pakistani women (Baseer et al., 1974). Urinary total protein is reported to be increased significantly in pregnant women compared to non-pregnant women, indicating a functional proteinuria due to physiological stresses (Akram et al., 1982). It has been stated that hypoproteinaemia, particularly hypoalbuminaemia is characteristic of malnutrition (Metcoff, 1967) and that protein malnutrition is usually associated with anaemia (Adams et al., 1967). This has important implications.

From the evidence assembled it appears that the nutritional status of Pakistani women of child bearing age is generally sub-standard resulting in anaemia and malnutrition which strongly affect the health of women and their progeny. Therefore, adequate nutrition is important not only during pregnancy, but also before conception. Further, good nutritional reserves during pregnancy and adequate dietary intake throughout the period of lactation are essential for adequate milk production. The importance of the latter for the infant's health is self evident.

Sustained effort is needed on the part of Government and the workers in the field of public health, nutrition and maternal and child health to create awareness and impart education to help improve nutrition and health of people in general and the females of child bearing age in particular.

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