
Early Detection Of Protein Energy Malnutrition In Infants and Children

Magda FawziEl Nagar

Malnutrition is an important health problem specially in developing and underdeveloped communities. Incidence, severity and manifestations of the syndrome vary considerably in different localities of the world and between different sectors of a community. Protein energy malnutrition (PEM) describes a range of clinical disorders. At one end, marasmus is due to a continued restriction of both dietary energy and protein, as well as other nutrients. At the other end is kwashiorkor, due to a quantitative and qualitative deficiency of protein, but in which energy intake may be adequate. These two syndromes are the extremes, between them are forms in which the clinical features are due to varying combinations of deficiency of protein and energy together with deficiencies of minerals and vitamins and with associated infections. These less well—defined early forms provide the majority of cases, which might easily pass unnoticed, are designated "marginal" or "subclinical" malnutrition. PEM occurs characteristically in children under 5 years. Typically the marasmic forms of the syndrome occurs in infants under 1 year which predispose to marasmus are a rapid succession of pregnancies and early and abrupt weaning, followed by dirty and unsound artificial feeding of the infants with very dilute milk products, given in inadequate amounts to avoid the expensive price of food. Thus the diet is low in both energy and proteins. Repeated infection, especially of the gastrointestinal tract, the mother often treats by starvation for long periods. On the other hand, kwashiorkor arises when, after a prolonged period on the breast, the child is weaned into the traditional family diet, this may be low in protein. If the customary diet of a population is limited in protein and in energy to around the minimum requirements, a child may be in moderate health until protein and energy needs are raised by infection. Kwashiorkor is frequently precipitated by outbreaks of febrile illnesses such as measles or gastroenteritis. A heavy load of intestinal helminths also contributes to the disease. Both marasmus and kwashiorkor arise as a result of poverty and ignorance. Even if food is available and there is money to buy it, many mothers have received no satisfactory instruction in infant feeding. Eggs, fish, meat and sometimes milk may not be given to children because custom or taboos do not allow them.