

Effect of Lathyrus Protein Concentrate on the Growth of Children

Shaheen Ahmed¹, HKM Yousuf², and HN Mondal³

Objective: Study the effect of a protein concentrate from *khesari dal* (Lathyrus peas) on the growth of malnourished children.

Methodology: A random sample of 30 second-degree malnourished children aged 1-3 year(s) was selected from the Kawran Bazar Beitola slum area. The children were divided into: (a) experimental group: those who received Lathyrus protein concentrate, and (b) control group: those who received a similar quantity of a cereal food, *suji*. Each child from both the groups was given fixed and measured quantity of food and vitamin at regular intervals for three months. The growth of each child was monitored by anthropometric measurement before and at regular intervals during the feeding period. Signs and symptoms of allergy, gastrointestinal disturbances, and clinical examinations of eyes, lips, tongues, etc. were recorded. A questionnaire was used for collecting information on the economic conditions, family background, and environment of the children. Data were analyzed by statistical method.

Results: The children of both the groups were suffering from second-degree malnutrition as analyzed by weight-for-age or weight-for-height. At the beginning of the experiment, the average weight of children in the experimental group was 6.82 kg and that of the control group was 7.37 kg. After 15 weeks of feeding, the average weight of children in the experimental group increased to 8.3 kg (mean weight gain 1.23 kg) and that of the control group to 8.05 kg (mean weight gain 0.97 kg). It means that weight gain was 26.8% more in the children taking Lathyrus protein concentrate feed. These children showed better resistance to diarrhoea and fever as revealed by the morbidity data.

Conclusion: The results of the study provide an encouraging indication of using the protein of a popular and vastly grown pea (*khesari dal*) as an excellent nutritional supplement for the undernourished children. Mass production of this easily cultivable legume and processing it to extract the concentrate to use it as a supplementary feed can help eliminate protein-energy malnutrition of a vast section of the population.

¹Department of Food and Nutrition, College of Home Economics, Dhaka 1000, Bangladesh

²Department of Biochemistry, University of Dhaka, Dhaka 1000, Bangladesh

³International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), GPO Box 128, Dhaka 1000, Bangladesh



Growth of the Newborns in Their Early Life (Two Weeks) According to Feeding Pattern in Rural Area of Bangladesh

Zeba Mahmud and Sadia A Chowdhury

Objective: Scrutinize the growth of the newborns for two weeks concurring to their feeding pattern.

Methodology: Over one hundred pregnant women, randomly selected and registered from 50 villages of Trishal thana of Mymensingh district, were prospectively followed up. The birth weight, length, head and chest circumference of their newborns were recorded within 24 hours of birth. Weight was collected daily,