

46. Assessment of neurotoxin contents in *Lathyrus sativus* (khesari-dal).
M. H. Rahman, A. I. M. Islam and A. J. M. A. Noor, *Institute of Public Health Nutrition, Mohakhali, Dacca.*

The present study reports the analytical results of neurotoxin contents in samples of *Lathyrus sativus*, whole grain splitted dal, collected from lathyrism prone areas and as well as from other areas of Bangladesh. This neurotoxin, present only in *Lathyrus sativus*, is chemically known as Beta Oxalyl Amino Alanine (B.O.A.A.) and is found to be the toxic factor for causation of human lathyrism. The prime objective of this study is to find out a low toxin and/or toxin-free variety of *Lathyrus sativus* which could be recommended for cultivation as a long term means for prevention of this dreadful disease.

A simple paper chromatography method is employed here for detecting and quantifying of this neurotoxin. The test is done on splitted dal, whole grain and husk of the seed of which splitted dal and whole grain showed positive results with neurotoxin contents ranging from 0.1 to 0.3%.

47. Single versus multiple dose of ampicillin in shigella dysentery.
Hassan Rabban¹, R. H. Gilman² and W. Spira², *1. Cholera Research Laboratory, Dacca, 2. Johns Hopkins University, Division of Geographic Medicine.*

There is evidence that prolonged therapy with high dose of ampicillin may not be needed to change the course of shigellosis. A single dose of ampicillin may well be sufficient to produce a clinical cure in most cases of shiga and flexneri dysentery to simplify treatment and greatly reduce costs.

We carried out a randomized, non-blind comparative trial comparing a large single dose of ampicillin with a 5 day divided dose schedule for the treatment of shigella dysentery. Of 129 patients, 91 were considered eligible for study. There were 50 adults and 26 received a single dose and 24 the multiple dose schedule. Of 41 children, 23 received the single dose therapy and 18 received the multiple dose therapy. Single dose therapy was 100 milligram per Kg per day given in a stat dose but not exceeding 4 grams as a maximum dose. The multiple dose was 100 mg/kg/day divided into 4 equal doses given for 5 days. The groups were homogeneous except that more children in the multiple dose group had fever on admission.

Both children and adults had a satisfactory response to a single large dose of ampicillin compared to patients treated routinely. No significant differences were observed between the two groups in terms of the rate of clinical improvement (cessation of bloody, mucoid diarrhoea) and disappearance of shigella from the stool. There were, however, a larger number of shigella isolations after treatment in patients who had received a single dose of ampicillin.

Studies of ampicillin resistance in fecal coliforms in these two groups showed less resistance after the single dose therapy on days 4 and 7 after admission to hospital. Within one week of stopping the antibiotic, both groups had predominantly ampicillin sensitive coliforms.

48. Assessment of nutritional status of school children up to 12 years in Dacca city.

M.H. Rahman, S. Miiza and Mofizuddin Ahmed, *Institute of Public Health Nutrition, Dietetics and Food Science, Mohakhali Health Complex, Dacca.*

The Institute of Public Health Nutrition, Dietetics and Food Science (Field Division) has conducted a nutritional status survey of the school going children at