

ADULT LACTASE DEFICIENCY IN A GROUP OF SRI LANKAN SUBJECTS

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Adult lactase deficiency appears to be a common condition in many parts of the world including Africa (Cook & Kajubi, 1966; Kretchmer et al; 1971), Asia (Bolin & Davis, 1969), and the Americas (Luyken, 1971; Bayless and Rosensweig, 1966). In these populations, ingestion of moderate quantities of lactose as in milk, causes severe gastrointestinal symptoms. A large proportion of Sri Lankans too appear to experience such symptoms. The present study was undertaken to study lactose deficiency in a group of Sri Lankan subjects.

Lactose tolerance tests were carried out in 43 normal Sri Lankan adults of age group 23-49 years. 50g lactose in 200 ml water was administered to the subjects after an overnight fast. Capillary blood sugar estimations were done at 15 minute intervals. Fasting blood sugar was determined before administration of the oral load. A graph indicating a rise of blood sugar less than 20 mg/100 ml was taken as a flat lactose tolerance curve (Bolin & Davis 1969).

Tolerance to a lactose load was studied in twelve normal Sri Lankan subjects of age 19-23 years, to determine the level of lactose that could be consumed without gastrointestinal symptoms. Increasing loads of lactose varying from 5-15g in 200 ml were given and any resulting gastrointestinal symptoms noted.

It was observed that 37 subjects out of 43 had lactose tolerance curves (86%). All these subjects had abdominal pain and 31 had diarrhoea following lactose loading. All the twelve subjects in the load-tolerance study could tolerate 5g lactose without any abdominal symptoms. Seven had abdominal pain and cramps after 10g. All the subjects had diarrhoea following 15g lactose.

It is concluded that 86% of subjects in this series are lactose intolerant. The tolerance level in the twelve subjects studied appears to be between 5-10g lactose.

References :

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