

- 2) By means of a transintestinal tube the instrument was introduced perorally into the gastrointestinal tract and endoscopic biopsy was made on the voluntary portions of the gut.
- 3) We measured disaccharidase activity by Dahlqvist's method. The measured enzymes are lactase I, Lactase II, Sucrase, and Maltase.

Conclusion:

- 1) It is not difficult and safe to introduce the endoscope with the help of intestinal string. But the preparation is complicated and the view in the gastrointestinal tract is limited because the gut is shortened with it.
As compared with blind biopsy, endoscopic biopsy is profitable that we can gain the specimens of the bowel every time, confirm to stop bleeding and carry out voluntary parts of the intestine.
- 2) As the results of our data, disaccharidase activity were settled generally in homogenates of the jejunum and ileum except that they seemed toward weaker in the terminal ileum.
- 3) One technician assayed enzyme activity of two or three specimens from the same part of a patient. Disaccharidase activity showed difference. We must re-examine the method of enzymatic assay.

(201) ENZYME ACTIVITIES OF JEJUNAL MUCOSA OF RATS WITH EXPERIMENTAL BLIND LOOP

T. Susuki, Y. Kato, T. Mizuno, H. Oya, S. Yoshino, and T. Hattori

*First Department of Internal Medicine,
Nagoya University School of Medicine*

It has been well established that blind

loops cause malabsorption and that some diseases with malabsorption show lowered activities of enzymes of small intestinal mucosa. This report concerns with the activities of enzymes of jejunal mucosa in experimental blind loop syndrome of the rat.

Adult white male rats of Wistar strain weighing 200 to 250 Gm. were used. Filling blind loops, 10 cm in length and 40 cm proximal to the cecum, were constructed in rats according to the method described by Cameron. A month after the operation measurement of fecal fat and activities of enzymes of rat jejunal mucosa, i.e., alkaline phosphatase, leucine aminopeptidase and disaccharidases (lactase, sucrase and maltase) were carried out.

Fecal fat for 3 days was 0.92 ± 0.15 (mean \pm S.D.) Gm. in the operated and 0.29 ± 0.18 Gm. in control rats. Lactase activity was inversely related to fecal fat. The activity was 9.3 ± 2.5 u./Gm. protein in rats with blind loop and 18.3 ± 3.9 u./Gm. protein in controls. There was no significant difference between the two groups in activities of the other enzymes. The operated rats showed an abnormal proliferation of flora in the hypertrophied and dilated blind loop filled with chyme. In the present study lactase was found to be the only enzyme whose activity was affected in association with the increase in fecal fat. It can be assumed that the functional disturbance in the cells of small intestinal epithelium evidenced by reduced lactase level results in steatorrhea. Further study is required to elucidate whether the functional disturbance of small intestinal mucosa is caused by an abnormal proliferation of flora or not, and whether that is the cause of steatorrhea or the result of malabsorption.

ERRATA: Previous number, Vol. 8, No. 1, 1973.

	error	correct
page 27, line 3:	ANOBSERVATION	AN OBSERVATION
page 38, line 2:	CLINIDAL	CLINICAL