B₁₂ CONTENT OF MOLDY BRAN AND BROOD LAC EXTRACTS

In the course of our studies on the microbiological assay of the B complex vitamins of aqueous extracts of moldy bran and brood lac, it was found that they contained some growth factors other than those shown to be present when the "all-vitamin" medium was employed for assaying. Addition of the moldy bran extract in concentrations corresponding to 20 mg. of nitrogen of the extract per 100 ml. of the "all-vitamin" medium gave a 20-25% increase in acidity.

The presence of B12 and its functionally related compounds have been tested for their presence in the extracts with the aid of the lactic culture, L. lactis Dorner, kindly supplied to us by Drs. Kocher, and K. K. Iya.* The response was strikingly positive and preliminary estimates reveal the presence of 1.6 my B₁₂ activity per c.c. of moldy bran extract and 0.17 my per mg. nitrogen of lac extract. The data are computed from a standard curve which was obtained by using a solution of crystalline B₁₂. Compared with liver extract, however, the moldy bran extract contains only 0.148 of the B₁₂ potency of the latter. The differential test for thymidine and B12 has not yet been made. The details of the investigations, now under progress, will be reported elsewhere. Our grateful thanks are due to Merck & Co., New York, for the gift of B_{12} (Cobione) ampoules.

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^{*}Obtained from Lederle Labs., Pearl River, New York.

^{1.} Mistry, S P., and Sreenivasaya, Unpublished data.

^{2.} Raghavendra Rao, M. R., Mistry, S. P., and M. Sreenivasaya, J. Sci. Ind. Res., 1948, 7B, 116.