

mans."³ It is clearly essential that this new point of view be extended to all investigators in clinical nutrition for it seems obvious that only in such a frame of reference lies the future of research on that most unique of laboratory animals—man.

—S. O. WAIFE, M.D.

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Letter to the Editor

DIABETIC RETINOPATHY: CORRELATION WITH VITAMIN B₁₂ EXCRETION

Dear Sir:

In 1953, Becker, Lang, and Chow demonstrated marked elevation in the urinary excretion of injected vitamin B₁₂ in diabetes with retinopathy as compared to non-diabetics and diabetics without retinopathy (*J. CLIN. NUTRITION* 1: 417, 1953).

In view of the difficulty of the microbiologic assay of vitamin B₁₂ in urine, a considerable amount of attention was given to validating the experimental and assay procedures with recovery experiments. In addition to the microbiologic assay, using *Lactobacillus leichmannii*, radioactive cobalt-labeled vitamin B₁₂ was used as a tracer, and this method gave results which were virtually identical with those of the microbiologic assay.

In a recent paper (*AM. J. CLIN. NUTRITION* 5: 26, 1957), Bookman and his associates report an attempt to reproduce our findings. A number of samples were assayed with three different micro-organisms, but no radioactive tracer studies are reported. Although the data are not presented in sufficient detail to allow fully adequate statistical analysis, the results with one of the micro-organisms *L. leichmannii* seem to yield a significant difference, at the 0.05 level, between diabetics with and without

retinopathy, although in the opposite direction from that found in the earlier work. The difference indicated by the ochromonas assay was almost significant at the 0.05 level, but, in contrast with the *L. leichmannii* results, the ochromonas difference was in the same direction as that reported by Becker, Lang, and Chow. (The *L. leichmannii* and ochromonas results of Bookman *et al.* are, of course, significantly different from one another.) We are at a loss to explain the statement by Bookman *et al.*: "No P values of less than 0.1 were found between any groups, indicating a total lack of significance for the average difference found between groups in all three methods."

In view of the considerable variability and inconsistent results of the assays using the different organisms, and the lack of any evidence to validate the procedures, the negative finding reported by Bookman *et al.* cannot be considered to contradict the results of the earlier work.

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