vitamin B_1 to accomplish its aerobic oxidation. Whether this is the case with mammalian tissues is a matter shortly to be investigated.

Our experiments indicate that the catalytic agent is cocarboxylase (vitamin B_1 pyrophosphate) rather than vitamin B_1 itself (*cf.* Lipmann[5]). Silverman and Werkman[6] have recently shown that propionic acid bacteria are capable of synthesizing cocarboxylase from vitamin B_1.

More complete details of these and related experiments will be published in due course.

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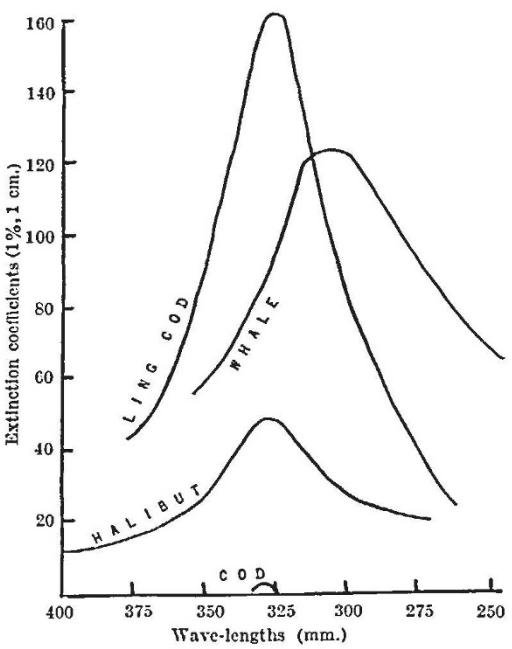
Vitamin A in Ling Cod Liver Oil

THE ling cod, *Ophiodon elongatus*, is an interesting fish because (1) it is neither a ling nor a cod; (2) it is found only in the north-eastern Pacific Ocean, and is one of the chief fish catches in British Columbia; and (3) it yields a liver oil rich in vitamin A[1].

Recently, in a routine examination of fish oils for whale oil adulteration, no published absorption curves for ling cod liver oil, or for Pacific whale oil, could be found. Such curves, together with average halibut and cod, are therefore presented in this note.



Ling cod liver oil is seen to have a typical absorption around 328 mμ (vitamin A), and in this case, to be much more potent than the sample of halibut liver oil.

Whale oil adulteration can easily be detected by the criteria of Drummond[2], though the curve for whale oil shown here is not quite identical with his curves.

We are very grateful to Dr. H. N. Brocklesby, of Prince Rupert, B.C., who observed the high vitamin A content of ling cod oil, for a sample of liver oil from carefully identified ling cod, and for the whale liver oil.

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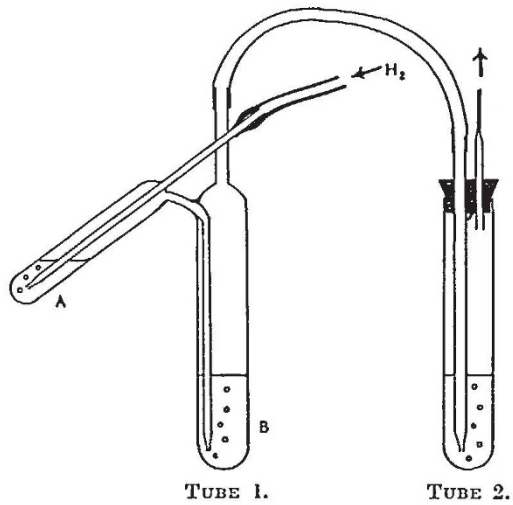
Decomposition of Hydrogen Peroxide by Catalase

IT has recently been stated[1], and it appears to be generally accepted, that the decomposition of hydrogen peroxide by catalase can only take place in the presence of molecular oxygen. It has been pointed out, however[2], that this phenomenon is difficult to understand, since it would be expected that such a strong oxidant as hydrogen peroxide would certainly react with the reduced form of the enzyme according to the scheme proposed[1]. As this point is of fundamental importance in relation to the mechanism of cellular oxidations in general, we have carried out some critical experiments to test the validity of the hypothesis. Our results have furnished rather unequivocal evidence that the hypothesis is untenable, and we would, therefore, like to report them here.



The apparatus used is shown in the accompanying diagram. Five c.c. of a 0·1 per cent solution of hydrogen peroxide in 0·125 *M* phosphate buffer, *p*H 7·3, and 0·25 *M* sodium chloride were introduced into the rear arm (*A*) of tube 1, which was then connected by lead tubing to a heavy glass tube containing palladium asbestos. The glass to lead connexions were sealed with de Khotinsky cement.