is the first evidence offered, indicating that the maternal organism will not always deplete its own stores in favor of its young. It also makes apparent the necessity of increasing the Vitamin B intake in the diet of an expectant mother and maintaining this increase at least through the lactation period. This will have to be regarded as prophylactic treatment because of the inability to diagnose a condition of Vitamin B shortage until after the onset of the symptoms when the institution of curative measures is of little or no avail.

The curative effect of increasing the yeast intake after evidences of polyneuritis were seen was almost nil. Therefore it is concluded that by the time clinical evidence of polyneuritis has become manifest the progress of the disease has so far advanced that recovery is extremely doubtful. This conclusion naturally infers the fact that there are changes occurring in an animal due to a deficiency of Vitamin B that give no visible evidence of their existence. These changes can affect the organism before birth as well as after. It is undoubtedly due to this fact that there is a prenatal limitation of litters in mothers who are receiving a minimum of the anti-neuritic vitamin. The experience of others in bettering the reproductive ability of their animals by increasing the yeast content of their diets can easily be explained on this basis.

The clinical application of the above findings will be of the greatest value in such countries as Japan, where, according to Takano,[2] infant mortality from beri-beri is so high. According to this author the mortality from beri-beri is the greatest among breast-fed infants to the extent that one half of all the deaths from this disease during 1923 were from this class. It is also significant to note from this author that while nine thousand infants died from beri-beri only five hundred mothers did so. He says: "There are instances in which sucklings suffer from beri-beri while the mothers show no sign of the disease. . . . One of the reasons for the high death-rate among infants is the fact that infantile beri-beri cases are, as a rule, apparently nourished and have no apparent complaints, so that when it is diagnosed as beriberi, it is already in the advanced stage of the disease and accordingly its prognosis is unfavorable." These remarks bear out some of the conclusions mentioned above.

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RATE OF GROWTH OF YOUNG LOBSTERS

DURING the summer of 1920 I undertook the problem of estimating the rate of growth of young lobsters. Having learned during the previous summer where to look for very young lobsters and how to capture them, I succeeded in capturing 262 lobsters under six inches in length. Of these 176 were under five inches, eighty-six were under four inches, and twenty-four were under three inches.

The contents of the stomachs of a number were examined, in order to learn something about the natural food of these animals, but that work has not been completed. The rest of the five-inch lobsters were liberated and the others retained for one year.

The 143 lobsters which were kept for further study were put into a large latticed box, divided by partitions into three compartments of different sizes. The latticed work was close, leaving only one quarter inch spaces between the pieces. The bottom of the box was covered with stones and sods of eel grass to make conditions as nearly natural as possible. For convenience the compartments were labelled I, II, III. In compartment I seventeen lobsters, having an average length of 2.86 inches, were placed. In compartment II we put sixty lobsters, having an average length of 3.60 inches. In compartment III we put sixty-six lobsters having an average length of 4.53 inches.

A suitable place was then selected, some distance from shore. The box was properly weighted, and so situated that there were several feet of water above the box at low tide. In this way all danger from ice was avoided. By means of a method which we devised, the lobsters were provided regularly with food and they were free to live practically in the same way as if they were free. They could burrow and hide among stones.

One year later the three compartments were again examined and the following results obtained. In compartment I fourteen out of seventeen were found alive. The average length was 3.97 inches. In compartment II thirty-two were found, having an average length of 4.75 inches. In compartment III thirty-six were obtained, with an average length of 5.79 inches.

Hence a lobster measuring 2.86 inches was found one year later to measure 3.97 inches, thus showing a yearly growth in length of 1.11 inches. In the same way a lobster measuring 3.60 inches grew to 4.75 inches, thus gaining 1.15 inches. Also a lobster measuring 4.53 inches grew in one year to measure 5.70 inches, thus showing an increase of 1.17 inches.

The expense of this investigation was borne by the Biological Board of Canada and the work was done under the supervision of the chairman, Dr. A. P. Knight.

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[2] Takano. *The Jap. Med. World*, 6:8, 1926.