

## VITAMIN B COMPLEX THERAPY AND CARDIAC PATHOLOGIES

One of the first noticed and most important effects of vitamin B avitaminosis is the bradycardia so prevalent among beriberi sufferers. Harris (1) claims that this cardiac effect is due to an excess of lactic acid, which is not oxidized in the absence of vitamin B.

The lowered respiratory quotient described by Stepp, Kuhnau, and Schroeder (2) in avitaminosis B is not due to the lactic acid factor but to the lack of another B<sub>1</sub> fraction which effects the catalysis of pyruvic acid. This clearly indicates the complex nature of the vitamin B heart factors.

Sherman and Smith (3) suggest that the vitamin B factor concerned with the removal of lactic acid (which factor Harris holds responsible in avitaminosis B for bradycardia) is entirely different from the factor which in avitaminosis causes heart block and further different from the factor which in conjunction with torulin regulates water distribution in the body.

Carter (4) has shown that pigeon heart block can be cured by administration of whole wheat but not by administration of vitamins B<sub>1</sub>, B<sub>2</sub>, or the fat soluble concentrates. In a later communication (5) he carries his experiments further and concludes that a wheat germ constituent different from vitamin B<sub>1</sub> leads to a complete restoration of cardiac function in case of pigeon heart block.

It should be evident that a complex vitamin concentrate is the only scientific one to use in cardiac conditions because of the innumerable various factors, all necessary, which are present in the vitamin B complex. Stepp, Kuhnau, and Schroeder (6), recognize this fact when they say, "- in cases of vitamin B<sub>1</sub> deficiency not responding upon administration of highly purified vitamin B<sub>1</sub> preparations in a manner expected, it is recommended, therefore, to prescribe yeast (Brewer's or dry) which contains all the factors of the vitamin B group - -."

"V-P" Vitamin B Complex concentrate contains these vitamins and associated food principles of the Vitamin B group and is in a much more concentrated form than yeast preparations.

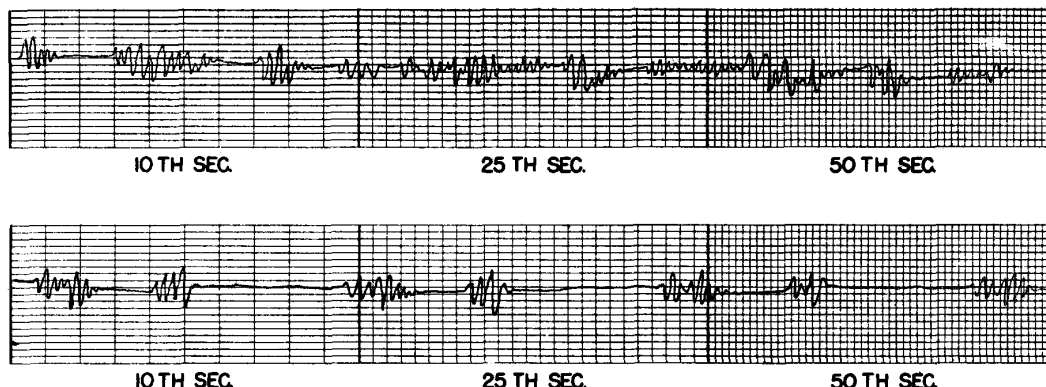
In such pathologies, therefore, it would seem beneficent to employ complex vitamin concentrates. Remarkable results from administration of our own "V-P" vitamin B complex concentrate are indicated on the charts on pages 90, 100 and 124 of Vitamin News. These results will be demonstrated in your own office on our Endocardiograph should you desire. Clinical results show no such rapid and complete effects upon administration of crystalline vitamin B.

"V-P" vitamin B complex concentrate was developed over a ten year period of clinical tests on HUMAN SUBJECTS. It is a FOOD concentrate obtained by PHYSICAL means in order to insure the presence of all the vitamins in the B group and the associated food principles necessary to produce completely satisfactory results from vitamin B therapy.

### BIBLIOGRAPHY

1. Harris, "Vitamins in Theory and Practice," Cambridge University Press, England, 1935, pp. 64-67.
2. Stepp, Kuhnau, and Schroeder, "The Vitamins and Clinical Application," English translation, Vitamin Products Co., Milwaukee, 1938, pp. 24.
3. Sherman and Smith, "The Vitamins," Chemical Catalog Company, New York, second edition, 1931, p. 81.
4. Carter, Biochemical Jol. 24; 1811, 1930.
5. Carter Maintenance Nutrition in the Pigeon and Its Relation to Heart Block, Biochemistry, 28: 933 - 939, 1934.
6. Stepp, Kuhnau, and Schroeder, "The Vitamins and Clinical Application," English translation, Vitamin Products Co., Milwaukee, 1938, pp. 64.

The effect of Vitamin B in five minute period in a 32 year old patient,  
J. B. of San Diego, California



Graphs by permission of Endocardiograph Co.,  
Milwaukee, Wisconsin

Pulse rate, 55 before administration of Vitamin B, and pulse rate, 70 afterwards.

The first graph shows very short rest periods and considerable fibrillation.

Second graph shows well-defined rest periods and a great reduction in fibrillation. This is due to the restoration of the function of nerve tissue and is illustrative of the rapid action of the Vitamin B fraction that is required by the heart. This fraction is not identical with crystalline Vitamin B<sub>1</sub>, but is part of the Vitamin B complex as found in wheat germ.

"The writer has had a personal experience with 'complete heart block' that after eight weeks' duration, subsided in four days on your Vitamin B Complex. The pulse of 28 stepped up to the normal 72, and the character and amplitude of the graph changed from a typical 'block' graph to one that was normal.

"On several occasions since then on the least indication of a possible return, he has resorted to Vitamin B of other makes, and he is convinced they are not as efficacious as your 'B Complex'. Your tablet seems to take hold and give instantaneous results."

(signed) W. D. O., M. D.

### CATAPLEX B V-P 712

A Vitamin B Complex containing 125 U.S.P. units of Vitamin B<sub>1</sub> per tablet, with naturally associated factors from yeast, cereal germ, beet juice and liver.

These sources have been finally selected as superior in our opinion for the correction of Vitamin B deficiency symptoms in human subjects, after reviewing clinical reports on their nutritional reactions. (The Cataplex B contains those factors first discovered as the preventors of the paralysis and polyneuritis of beriberi and represents roughly that part of the Vitamin B Complex essential to the maintenance of the nervous system. Later, additional factors that were essential to the metabolism of fats and for the maintenance and repair of tissue were discovered in the B Complex. This group we supply in higher concentration in our Cataplex G.)

Suggested dosage: 1 to 4 tablets per day or as directed.