

# VITAMIN NEWS

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## NUTRITIONAL FACTORS AFFECTING THE HEART

Those who have had occasion to make many heart examinations by means of diagnostic apparatus, such as the electrocardiograph, sphygmograph, cardiophone, etc., concur in the comment that a functionally sound or normal heart is as uncommon as a perfect set of teeth.

Perfection in either case is dependent upon adequate nutritive factors. We know now that it is the great exception to find an individual without definite physical marks of deficiency, and the heart is no more immune to such deficiencies than are the teeth or the endocrine system.

The nervous control of the heart is effected by means of a balance of power of the two divisions of the autonomic nervous system - a resultant of the opposing stimuli received from the sympathetic and vagus (or parasympathetic) innervation.

The sympathetic tends to speed up and increase the circulation of blood in response to physiological demands; the vagus inhibits according to similar demands. (The former is the accelerator; the latter the brake.)

Exercise, anger and emotions initiate stimuli to the sympathetic. Deficiency of the organic potassium (found in green leaf vegetables) can paralyze the vagus, allowing these stimuli to the sympathetic division to have too great and too prolonged an effect. The result is "sympatheticotonia," with tendency to

- tachycardia
- hypertension
- rapid respiration
- dry mouth
- paralysis of muscles of accommodation
- exophthalmos
- low gastric acidity (hypochlorhydria)
- gastrointestinal hypotonicity
- spastic sphincter
- leukopenia
- constipation (1)
- dehydration.

"V-P" Organic Mineral tablets are a convenient and rapid means for supplying organic potassium. (See special bulletin)

Worry, shock, bad news, fright, etc. initiate stimuli to the vagus, and deficiency of the phosphoric radical (2) paralyzes the sympathetics, permitting too great and too

(1) Robertson and Doyle, Intestinal Stasis in Low Mineral Diets, Journal of Nutrition, 9,5:553-569, May 10, 1935, point out this potassium deficiency as a probable common cause of constipation.

(2) Action is by reason of loss of calcium from the nerve cell through its reversion to carbonate from phosphate, the carbonate being inert physiologically.

prolonged an effect from these causes that initiate vagal stimuli. The result is "vago-tonia," with tendency to

- bradycardia
- angina pectoris
- hypotension
- irregular respiration
- excessive salivation
- spasm of muscles of accommodation
- enophthalmos
- leukocytosis
- gastric and duodenal ulcers
- hyperchlorhydria
- nervous indigestion
- gastrointestinal hypermotility
- relaxed sphincter
- spastic gastrointestinal musculature
- diarrhea
- hydration.

It is evident now why heart symptoms and digestive disorders are usually concomitant.

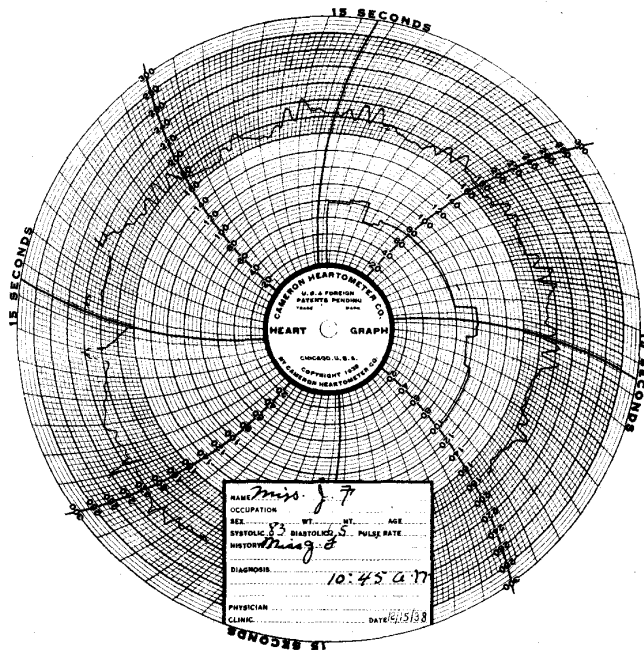
Where the vagus is not opposed and becomes dominant, by reason of partial paralysis of the sympathetic system, the common cause is phosphorus and phosphate deficiency. "V-P Phosphate" is a quick and convenient means for restoring balance in that case. (See special bulletin)

Let us here consider the patient having a heart that is somewhat impaired functionally or organically, so that it is unable to respond to demands for reserve effort. Suppose a deficiency of potassium develops, with consequent over stimulation by the sympathetics by reason of the impaired vagus inhibition. The heart will be found to be laboring as if under the demands of exercise - an engine without a governor. Nutritional deficiency here aggravates a situation that would not otherwise be serious.

With vitamin deficiency to starve the endocrines and mineral deficiency to paralyze either or both divisions of the autonomic system, any combination of the two lists of consequences of autonomic unbalance is possible.

Vitamin B deficiency alone can so impair the muscular and nervous functions as to cause extreme embarrassment of the heart.

On the next page is shown a graph of an interesting case. Patient, female, age 30. In graph No. 1 (10:45 A.M.) we see three feeble pulsations, followed periodically by three barely distinguishable attempts at contraction. Six tablets of "V-P" Vitamin B Complex were administered and at 11:00 A.M., FIFTEEN MINUTES LATER, graph No. 2 was made. A NORMAL PULSE WAS FOUND with a rise in systolic blood pressure of 17 mm. nearer normal (83 mm. to 100 mm.).



10:45 A.M.

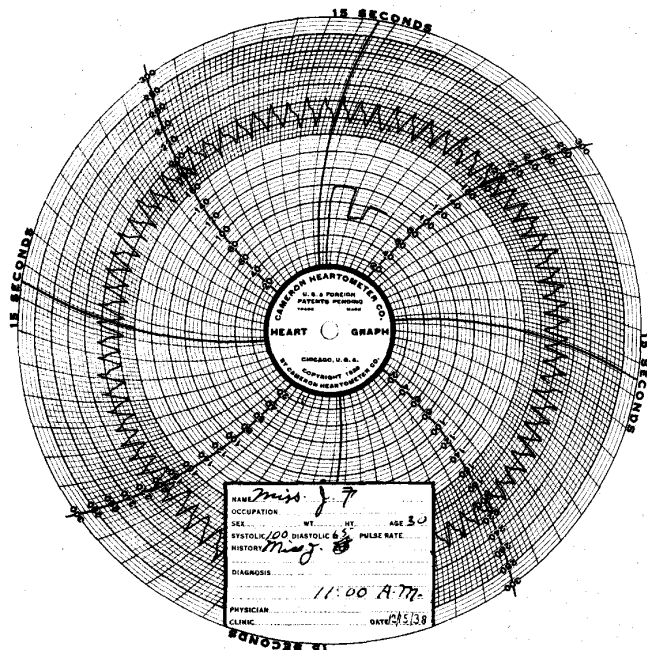
How would you diagnose this case?  
(Acute deficiency of Vitamin B Complex)

In hyperthyroidism we find a result of vitamin deficiency (aggravated by iodine and organic potassium paucity), in which the oversecretion of thyroid hormone brings about an excessive elimination of calcium and phosphates. The end result is a specific form of autonomic unbalance modified by the presence of thyrotoxicosis.

That explains the phenomenal relief in hyperthyroidism that usually follows the use of "Catalyn" with "V-P Phosphate" and "V-P" Organic Minerals which is frequently successful even where recurrences have necessitated successive thyroidectomies. It is obvious that surgery cannot cure a dietary deficiency, but can only remove consequences.

The older books on materia medica highly recommended metaphosphoric acid as a remedy for nervous indigestion and nervous instabilities. The more recent authorities have thrown out such recommendations with the statement that "hydrochloric acid should be preferred", naively assuming that the indigestion was due to a lack of this component of gastric juice. The phosphoric radical on the other hand, is really the natural remedy to stop the excessive secretion of hydrochloric acid present in nervous indigestion and allied conditions.

Edited by R. Lee



11:00 A.M.

Same day, same patient  
(A nearly normal graph)

Often where both potassium and the phosphoric radical are lacking, we may need both "V-P Phosphate" and "V-P" Organic Minerals in the same case.

The old-time veterinarians prescribed metaphosphoric acid for horses that were "skittish" and nervous from too much green grass and oats (containing organic potassium in abundance and no phosphoric radical, wheat being the only cereal carrying it in substantial amounts).

We recall that cod liver oil was also derided once by the authorities as being "no better than so much butter." Effective prescriptions including linseed oil for application to the skin, were changed to call for "sweet oil", under the mistaken assumption that "oil was oil", with resultant total loss of effect, the original effectiveness having been due to the Vitamin F content of the linseed.

These items of history are brought to your attention to emphasize the fact that YOU ARE ACCOUNTABLE FOR RESULTS ONLY, and your patients depend upon YOUR JUDGMENT based upon your experience. The longer a physician has practiced the more he depends upon his own observations and the less he depends upon those of others.