## VITAMIN NEWS

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## HEART DISEASE - OUR NATIONAL DISGRACE

Because of our national malnutrition, heart disease is our leading cause of death.

How is this brought about? What special deficiencies do this?

First is the deficiency of vitamin C. The C complex is one of the factors necessary in the blood stream to maintain its capacity to carry oxygen to the tissues from the lungs. With a depleted reserve of this vitamin, the heart is called upon to pump blood at a faster rate to keep up the necessary flow of oxygen to the tissues. This is, of course, automatic. If we develop this condition, we feel an increased force of heart beat and in time complain of "shortness of breath." The heart itself is simply overloaded. In time it breaks down from the overload. It may become dilated, valves begin to leak, the patient complains of "heart pounding."

To recommend citrus fruits to supply the vitamin C is not good as the acid in them is not at once oxidized, and depletes temporarily the alkalibuffers in the blood. This in itself lowers the oxygen-carrying capacity of the blood stream. The various proprietary alkalizers on the market are very helpful in cooperating with the vitamin C to take the load off the heart. Persons who go to high altitudes from relatively low altitudes often find that they are unduly fatigued, their heart may "pound," and they yawn often and feel short of breath. All this means oxygen deficiency in the blood. Afew days are required for acclimation and the body adjusts itself to the light air.

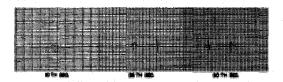
Visitors to Mexico City usually feel this influence quite definitely because of the 7,500 foot altitude. One railroad company in South America made a practice of having a physician check the heart condition of each passenger before accepting him for passage on their line over the Andes. Going quickly into high altitudes in an airplane is not so detrimental. The blood stream seems to maintain its oxygen content long enough to avoid trouble from sudden changes of altitude. Several hours apparently are required for the development of distress signs.

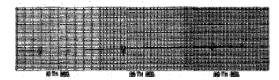
The adrenal glands control our balance of potassium-sodium in the blood and blood pressure. The latter by adrenal medulia secretion of adrenalin, the former by the effect of the hormones of the adrenal cortex, and we must recall here that to accomplish this the adrenal gland must be supplied with vitamin C in particular and some vitamin A and B, too.

Adrenalin contracts the blood vessels of the general body circulation but <u>relaxes the bronchioles</u> in the lungs.

A deficiency of adrenal activity causes a general loss of vascular tone (low blood pressure) obvious fatigability, but a high blood pressure in the lungs with congestion and possible tendency to asthmatic symptoms.

This hypertension in the lungs is obvious in an endocardiogram of the sound taken from the pulmonary position of the microphone. The aortic and mitral positions may show an almost imperceptible second sound indicating extreme low blood pressure. The second sound is made by the closing of the valves after the heart impulse ceases. This closing is abrupt and forceful if the pressure is normal or high, otherwise it is not. But the sound of the closing of the valve leading to the pulmonary artery is often greater in magnitude than the first sound where this pulmonary hypertension exists. There is apparently no other convenient way to detect the pulmonary pressure. (See endocardiograms below.)





It has been found that all the effects of adrenalin are also effects of potassium. Adrenalin,
therefore, apparently does its work by mobilizing potassium which normally is stored, or at
least is present only to any extent, inside the body
cells. Adrenalin brings it out into the blood
stream where it produces the reactions commonly
known as adrenalin effects. No doubt a deficiency of potassium in the diet aggravates any tendency to hypoadrenalism. A potassium deficiency is
also brought about by the excessive use of white
flour and white sugar. There is pienty of potassium in whole wheat, sugar cane juice, molasses,
and raw sugar.

The deficiency of vitamin B complex is specifically productive of loss of tone of the vascular system and tends to demoralize nerve functions that coordinate body activities. An atonic bowel sets the stage for constipation and protein decomposition is enhanced. Here we find an alarming new set of circumstances. Some strains of colon bacillus have been found to produce histamine from some proteins, animal foods particularly and histamine is an organic toxin if out of place, but also normally acts as a hormone that regulates the secretion of gastric juice as a normal "messenger substance" between the pyloric and fundus areas of the stomach. (Also known as "gastrin.")

Now, when histamine is free in the circulation, it destroys the normal balance of this stomach control mechanism. The fundus glands are stimulated to secretion of hydrochloric acid by the histamine which is in the entire blood stream. The messages now did not originate from the pyloric end of the stomach. They do not cease when the need for digestive fluids is passed. The hyperchlorhydria thus created is considered a cause for stomach ulcers (Jol. A. M. A.). But the primary cause is deficiencies of the various vitamins and minerals as above listed. (Clinically, the prompt relief for hyperchlorhydria is usually obtained by the use of vitamin G complex, one or two tablets with each meal.)

The histamine group of toxins, others are thought to accompany it from the same protein hydrolysis, is suspected to cause various systemic disorders. Arthritis is at the top of the list. Various obscure symptoms, even multiple sclerosis, may be end results of such absorption of intestinal toxins. We recall a case diagnosed as multiple sclerosis, in which all and various medications and treatments failed to halt the progress of the paralysis until an x-ray disclosed a colonic condition permitting a stagnation of bowel contents. The removal of this colonic disorder resulted in a prompt reversal of the progress of the paralysis, with apparent complete recovery.

Histamine in the blood in undue amounts quite probably causes a tendency for contraction of the bronchioles in asthma and probably acts in many allergic reactions as a primary sensitizer.

To understand this, we must recall that histamine relaxes capillaries, contracts bronchioles, just the opposite of adrenalin. It causes a lowered blood pressure of the general circulation and a higher blood pressure in the lung circulation. "Adrenalin and histamine are marked antagonists in their effects on the circulation" (Grollman,

p. 268). If we accept this tentative hypothesis, we may consider the patient who is absorbing protein toxins from a stagnated bowel should therefore show some of the following possible indications:

- Gastritis, tendency to stomach or duodenal ulcers.
- May be allergic, asthmatic, arthritic, or tend to have neuritis, hives, or even possibly paralysis (multiple sclerosis).
- Hypotension and pulmonary hypertension, as indicated by a relatively reduced second sound over the aorta and an accentuated second sound over the pulmonary artery.
- Fatigability and a generally lowered physical condition.

NEWS ITEM . . . 'The London Lancet,'' for August, carried an article by Dr. Alan Moncrieff, to the effect that he had found that nicotinic acid was a valuable remedy for angina pectoris and also for cerebral thrombosis.

V. P. vitamins have been used for these purposes successfully for twelve years; "Catalyn" for the cerebral thrombosis case, vitamin E complex in addition for the angina pectoris case. We believe an unisolated sex hormone will be ultimately found to be a specific remedy for the angina syndrome. The known sex hormones aggravate the condition, but the vitamin E complex usually produces gradual improvement, and it is probable the results are due to a more normal balance in the output of hormones by the gonadal cells. It is significant that the male sex incurs angina pectoris about six times as frequently as the female, and it has been concluded that all the sex hormones, except progesterone, are common to both sexes. So we think there is some hormone in the female gonad that is secreted in higher amounts than in the male that prevents angina pectoris, and that the vitamin E complex aids in promoting the secretion of this hormone.

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Edited by Royal Lee

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