Medicine and Health

A valuable antidote—Heart disease—A new antibiotic—Animal cells

NATURAL VITAMIN E FOR HEART DISEASES

Some medical authorities say this is a cure for heart disease— Number One Killer of our time

POPULAR Science Digest will not publish any medical news which does not appear to be in the public interest, or which has not been sponsored by competent and reliable authority.

That is not to say, however, that we will avoid everything controversial. On the contrary, we will sometimes give publicity to developments which may be in dispute—including medical matters—provided that there is a reasonable body of skilled and responsible scientific opinion behind them.

Disapproval of the B.M.A.

Vitamin E (Alpha Tocopherol) is a case in point. The British Medical Association frowns on it. Professional journals controlled by the B.M.A. refuse to accept advertisements for it or to publish clinical articles endorsing its value.

On the other hand, some leading pro-

On the other hand, some leading professional journals in different parts of the world, including *The Lancet* and *The*

The Davidoff Plan

(continued from page 3)

The chief and most difficult problem to be studied was that of radioactivity after an explosion. The Russians have already gone a long way towards controlling these explosions. They have also been trying out a means of eliminating the residual radioactivity. As it is a method which takes time, positive success is not yet certain.

Practitioner, accept advertisements and carry clinical articles. Nearly three-quarters of the medical profession in Canada—so it is claimed—prescribe Vitamin E for cardiovascular conditions. During the last few years, 122 independent reports have been published in the world's medical journals in support of Vitamin E. Wholesale druggists in the United Kingdom carry stocks. Many English doctors prescribe it. It was discovered and developed by doctors.

Patients Treated in Canada and U.K.

By the end of March, 1952, over 8,600 cardiovascular patients had been treated at the Shute Institute in Canada, including more than 160 physicians as personal patients. In the United Kingdom, some thousands of cardiacs have been treated since the introduction of the therapy to the British medical profession in 1948.

There is, therefore, in our opinion, a sufficient weight of professional approval to warrant a factual and objective report. The information we give is as supplied to us by the Bioglan Laboratories of Hertford (England).

Origin of Vitamin E

Original experiments, some 19 years ago, were carried out with wheat germ oil, but the natural Vitamin E of high and reliable potency in use to-day is derived from vegetable oils other than wheat germ. Vitamin E has also been synthetised, but the synthetic E is not commonly used for

heart disease because, in high dosage, it is not well tolerated by most patients.

The natural Vitamin E-it is claimedhas been demonstrated to be highly effective in the treatment of coronary disease, the incidence of which appears to be linked with a deficiency of Vitamin E in the diet dating from the beginning of the century, when millers discarded Vitamin E in the processing of grain. The incidence of coronary disease is low in those countries of the world where the population still eats whole grain.

Vitamin E Therapy Improves **Damaged Hearts**

Alpha tocopherol (Vitamin E) therapy has the distinctive feature of improving the function of damaged hearts by attacking the underlying pathological changes.

Heretofore, the drugs at the disposal of the cardiologist such as digitalis, quinidine, the mercurial diuretics, and nitro-glycerine have helped to re-establish more normal function, but have left the basic pathology unaltered.

Alpha tocopherol therapy, therefore, opened up a new era in the treatment of cardiovascular disease. Cardiac patients show symptomatic improvement because the underlying pathology is altered, and function then becomes the measure of the degree of actual improvement.

Some of the Claims

Results achieved in thousands of patients treated with alpha tocopherolcases of every common type of heart disease, and displaying virtually every known complication and every degree of severity-have led to the following claims for its efficacy:

(1) Alpha tocopherol is the most effective known medication in the treatment of heart disease, and certainly the safest.

(2) The percentage of cases which show improvement following its administration is high (over 80 per cent.).

(3) The degree of improvement, even in the worst cases, is often marked, and allows a return to activity in many cases of great disability.

(4) Improvement continues for months, even years.

Mode of Action of Alpha Tocopherol

Much is already known of the mode of action of the tocopherols-the volume of scientific literature on the subject is already large. The evidence goes to show that alpha tocopherol:

(a) Decreases the anoxia of the cardiac muscle—a change equivalent physiologically to increasing its blood supply.

(b) Decreases capillary fragility and permeability.

(c) Produces dilation of arterioles and venules.

(d) Prevents further thrombosis and helps to resolve existing thrombi (blood clots).

(e) Invades scar tissue with fresh blood vessels, thus softening or relaxing it.

Effects Established

The following are the effects said, by those who have developed Vitamin E therapy, to have been definitely established and confirmed so far:

- (1) Oxygen Conservation: The pain of angina pectoris is considered to be due to a lack of oxygen in the muscle of the heart, produced by a decreased flow of blood through the coronary arteries. The right concentration of alpha tocopherol for each type of case decreases the oxygen requirement of muscle by as much as 43 per cent. The action of tocopherol then, is physiologically the equivalent of increasing the available blood supply to the heart muscle by a like amount-so angina is abolished completely or develops only on greater effort than before the use of Vitamin E.
- (2) Clot Control: Zierler of Johns Hopkins and Ochsner of Tulane Uni-

versity have established that alpha tocopherol is an effective antithrombin, a substance which helps to prevent the formation of clots inside blood vessels. The doctors at the Shute Institute have seen it melt away clots in veins, sometimes in as little as five to ten days.

Protective Effects

Zierler suggests that alpha tocopherol is a natural antithrombin in the human blood stream, and says that it is effective even in normal concentration.

Unfortunately, the protective effect of alpha tocopherol is not perfectly adequate in a patient who has already had a coronary thrombosis—probably because he has already demonstrated degenerative changes in his coronary blood vessels. The same roughened and damaged arterial wall that was responsible for his first clot may initiate another clot, although the chances of this are greatly reduced.

If alpha tocopherol concentration is maintained at a normal level, or higher, by the daily intake of enough of it, it should prevent coronary thrombosis in "normal", younger people. It appears to offer the one hope we have at present of wiping coronary thrombosis off the medical map.

Heart Disease-Number One Killer

Heart disease is the number one killer of our time. In Canada, for example, someone dies of heart disease almost every minute. It kills thirteen times as many people as tuberculosis, seven times as many as pneumonia, three times as many as cancer, six times as many as accidents.

It affects all age groups. It is the leading

killer of children between ten and fifteen, and the second killer of young adults of nineteen to twenty-four. Amongst those under twenty, there are fifty deaths from heart disease for every single death from whooping-cough, diptheria, measles, and polio combined.

According to current statistics, one out of three of those now living on the American continent will die of diseases of the heart and blood vessels. One out of two of those now over forty-five who die in 1953 will die of heart disease. As a cause of death, heart disease has risen 250 per cent. within forty years.

A Strong Case for Investigation

This is a case for the closest and completely unbiased examination, by those competent to do so, of the claims of those who have developed and sponsored Vitamin E therapy.

We have at our disposal the details of a large selection of successful treatments by this means.

The Vitamin E product and Vitamin E therapy have been developed by the Shute Foundation for Medical Research, of Ontario. The substance is manufactured in the United Kingdom by the Bioglan Laboratories of Hertford.

In conclusion, we must emphasise that this Vitamin E preparation should be taken only under medical supervision. It is unsuitable for self-medication.

The Editor of *Popular Science Digest* is not himself competent to adjudicate on the claims put forward for Vitamin E. But he is satisfied that these claims are made by responsible medical men, and that there is a strong case for thorough investigation.

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