MEDICINE

Who Gets Streptomycin

Typhoid, rabbit fever, a special kind of heart disease and undulant fever are among the nine diseases which will be treated with the drug.

➤ PATIENTS with typhoid fever, a special kind of heart disease, and tularemia or rabbit fever, are among those who may get streptomycin from the present very limited supplies of this antibiotic drug.

Acute brucellosis, also called undulant fever or Malta fever, with bloodstream infection, is another of the nine diseases which a National Research Council committee includes on the list for which it will allocate supplies of streptomycin for clinical investigation.

The special heart disease is bacterial endocarditis due to infection with gram negative bacilli. Penicillin is not very active against gram negative bacilli or bacteria, which is one reason for trials of streptomycin in such infections.

Gram negative infections of the kidneys and bladder resistant to sulfa drugs, and other infections with such germs causing blood poisoning, will be investigated with streptomycin treatment.

Paratyphoid fever, a relatively rare kind of pneumonia due to Friedlander's bacillus and pneumonia, meningitis, middle ear disease and laryngo-tracheitis when due to a germ called *Hemophilus influenzae,* complete the list of diseases to be studied. This last germ, in spite of its name, is not the virus causing influenza.

Leukemia, cancer, fever of unknown cause, rheumatic fever, rheumatoid arthritis, chronic idiopathic ulcerative colitis and lupus erythematosis acutus disseminatus, which is a chronic skin disease, will not be studied at present, Dr. Chester S. Keefer, chairman of the committee, reports. (Journal of the *American Medical Association,* May 4).

Only those patients with tuberculosis who were getting streptomycin before March 1, 1946, will be included in the study, although the committee hopes to extend the study of streptomycin in tuberculosis when a larger supply of the drug is available.

Patients with the diseases and infections on the list for study will get streptomycin only if they are under the care of certain accredited hospital physicians or if their own physicians comply with regulations for furnishing full information about the case to the committee.

No patient who does get streptomycin may pay for it, nor will any physician be charged for it. Grants in aid from 11 pharmaceutical and chemical companies are supporting the study of the committee and will pay for the drug.

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NUTRITION

Calorie-Cutting Effects

Depend on time, body fat, size of cut. No sharp line between how many calories a day are required and how many are extra or desirable for best health.

➤ AMERICANS going on a calorie-cutting diet to save food for hungry Europeans will feel the effects according to: 1. how drastic the calorie-cut is; 2. how long it is continued; 3. how much reserve of fat and protein is stored in their bodies.

No sharp line can be drawn between how many calories a day are absolutely required and how many are extra or desirable for the best health. A person can get along on practically no food at all for a week or so. Shipwrecked men have gone for weeks with no food at all and survived, though they may have been almost dead when rescued.

A daily ration of 1500 calories is considered about the least on which life can be maintained with any sort of health over any length of time. Yet many overweight persons have lived for weeks and months on reducing diets, prescribed by physicians, which furnished far fewer than 1500 calories per day. These people were able to eat less calories because they were living partly on the calories from fat stored in their bodies.

Scientists, in recent years particularly, have been more concerned with finding the best diets for good health than with learning how little food people can live on. During the war, however, Dr. Ancel Keys and associates at the University of Minnesota studied the effects of starvation on 34 normal young men.

These previously normal men lived for six months on a European type of famine diet. Instead of the 3200 calories daily they required for good health they existed on 1790 calories a day. Their daily diet had less than one ounce of fat and less than two ounces of proteins from meat or fish, or eggs or cheese or milk.

They felt cold and hungry and depressed. They lost one-fourth of their body weight. Their muscles became so weak after 24 weeks on the diet that they could only run 52 minutes on a motor-driven treadmill, although before going on the diet they could run for over four hours before becoming exhausted.

Dutch children during the last seven months of the war had their rations cut to 700 calories daily. These children lost weight, became anemic, failed to grow at the normal rate and their bones were decalcified. They complained of pains in the legs and could walk only with difficulty, Dr. J. H. P. Jonxis, of the Children's Hospital at Rotterdam, reports. The children were more susceptible to infection.

About five times as many children between one and five years died as normally would have. They did not die because they were starved to death, however. Bad hygienic conditions and lack of hospital beds were the chief causes of the deaths, especially of those children who died of diphtheria and dysentery. Even well-fed children, Dr. Jonxis reports, died of severe dysentery.

The effects of short rations depend not only on the number of calories in the daily diet but on the amount of protein, vitamins and minerals.

The men who voluntarily went on a famine diet at the University of Minnesota showed little or no signs of vitamin lack. The Dutch children also rarely showed signs of striking vitamin lack. Vitamin A was the only lack which was striking in a great number.

Americans who voluntarily cut their daily rations to share food with the hungry in Europe can guard against vitamin lack by planning their diets carefully as medically prescribed reducing diets are planned.

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