

NUTRITION

Limited Protein Diet

New kind of reducing diet, now being tested for effectiveness and safety, allows patients to eat all sweet, fat and starchy foods desired, restricting only protein intake.

► A NEW kind of reducing diet is being tested on some very fat people at the Hospital of the Rockefeller Institute for Medical Research, New York.

Exact details have not yet been worked out and the doctors testing it are not yet ready to recommend it indiscriminately. It might be harmful to people under certain conditions.

If it proves safe and effective, however, it will be popular. Those on the diet will not feel hungry or weak. They will be able to eat all the sweet and fat and starchy foods they want.

The point is, they will not want much of these fattening foods. In fact, they will not have the appetite for eating too much of any food.

The diet will restrict those following it in the amount of protein they can eat. Only a small amount of foods such as meat, milk, eggs, fish and poultry will be allowed. Even the high protein vegetables such as peas and beans will be limited.

The new diet, now under trial as a reducing diet, is based on the discovery that when the amount of protein is reduced, appetite goes down and weight falls off. This discovery was made by Drs. Vincent P. Dole, Lewis K. Dahl, Irving L. Schwartz, George C. Cotzias, Jorn H. Thaysen and Cecilia Harris.

The finding, reported in the *Journal of Clinical Investigation* (Feb.), was made on patients with high blood pressure. Patients put on the rice-fruit diet developed by Dr. Walter Kempner at Duke University, Durham, N. C., rapidly lost weight. During this period of rapid weight loss, they took a reduced number of calories, in other words, ate less. But when their weight stabilized at a new, low level, they began to take in about as many calories as before, even though by that time, after four months on the rice-fruit diet, they were "heartily bored with the menu."

Seeking the dietary factor responsible for this, and also its importance in treating high blood pressure, led to discovery of the appetite-decreasing effect of the diet.

So far as the blood pressure was concerned, salt, or rather the sodium in salt, was the important factor. When this was restricted to a very low level, blood pressure was reduced even when the protein intake was varied ten-fold.

When the protein was reduced, however, there was always a reduction in weight and when the protein was increased there was always an increase in weight.

The amount of protein in the diet was low, but not too low for good health. The

scientists point out that "a large number, perhaps a majority, of the people in the world live, work and reproduce on diets that are at least as restricted."

For growing children, patients with liver disease or after operations, for alcoholics and perhaps for many others this diet might be too restricted.

Why the low protein diet reduces appetite and weight is explained by the theory that with reduced protein intake, there is a reduced rate in the body's metabolic processes for handling protein. All the metabolic rates then get out of balance and some chemicals from other foods get into a state of relative surplus.

The appetite is therefore depressed and the "inventory" of these other chemicals is allowed to shrink until a new steady state is reached. This takes several months. After that the appetite returns to a point where there is a balance of food intake with expenditure. In other words, the person then eats only as much as he needs to replace the energy he uses.

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SEVEN-DAY-OLD TWINS—These two tiny cubs, born at the National Zoological Park in Washington, have a grandfather that was an Arizona puma and a grandmother that was a mountain lion.

• RADIO

Saturday, March 28, 1953, 3:15-3:30 p.m. EST
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

W. H. Shepherd, vice-president of the Arkansas Power Company, Frank W. Cantrell, managing director of the Arkansas Economic Council, and Arthur Emmerling, director of the Arkansas Resources and Development Commission, discuss "Resources in Arkansas."

SURGERY

New Map of Head Aids Brain Tumor Spotting

► A NEW map of the head for better localization of brain tumors by the radioactive isotope method has been constructed by Drs. Alexander Langer and Robert Loewinger of Mount Sinai Hospital, New York.

Not only brain tumors but other diseased conditions of brain tissue due to circulatory deficiency might be detected, they think, by use of their map and technique.

With their method, reported in *Science* (March 7), mathematical computations and the map are used instead of the "skill and experience" of the doctor in localizing the brain tumor. By injecting radioactive material into the veins of 13 patients who had no brain disease, they were able to map the average pattern of isotope distribution for the normal head. This is used for comparison with maps made of patients with brain tumors.

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