neys and liver seen in these women can be produced in rats on a diet lacking in choline, Dr. Paul Gyorgy, of the University of Pennsylvania Medical School, reported at a conference held by the New York Academy of Sciences.

Eating a high protein diet would be better for the expectant mothers than taking doses of choline to prevent the condition, Dr. Gyorgy believes. In the rats a deficiency in the ratio of choline

to cystine, one of the amino acids from proteins was as important, if not more so, than lack of choline in producing the kidney and liver changes.

Massive hemorrhage in the adrenal glands and a bone marrow degeneration which results in anemia occurs when rats, and maybe humans also, do not get enough of another B vitamin, pantothenic acid, Dr. Gyorgy reported.

Science News Letter, December 7, 1946

GENERAL SCIENCE

lazi Mass Sterilization

➤ ADD TO THE HORRORS of war the possibility of making all the people of a nation barren without their knowing they had been sterilized. This possibility was explored by Nazi physicians, Dr. A. C. Ivy, vice-president of the University of Illinois, reports. Dr. Ivy has returned from a government mission on which he was the American Medical Association representative to investigate war crimes of a medical nature.

Putting the dried juice of a plant in the food of a population and exposing men and women to a castrating dose of X-rays while they filled out government forms were two methods of secret mass sterilization studied by Nazi physicians.

One series of murders was done to provide skeletons for an anthropological

Operations were done on human beings as part of the procedure in training students in surgery.

Besides the mass sterilization studies, Dr. Ivy lists 15 other experiments in his report to the Secretary of War.

Twenty-three Nazi physicians will be tried in Nuernberg, starting Dec. 5, in charges of having conducted experiments on human beings resulting in innumerable deaths. The American Medical Association, through an editorial in its Journal, gave as its verdict that such experiments certainly are "contrary to the laws of humanity and the ethical practices of the medical profession which have prevailed for more than 20

"Not the slightest good to mankind has resulted from these experiments. The basic sciences and medicine languished in Germany during the period of the war more than in any other coun-

"Perhaps most serious of all is the failure of German medical organizations and societies to express in any manner their disapproval of these widely known experiments."

Science News Letter, December 7, 1946

Bodies Need Fat, Protein

➤ CONSUMER demand for meat or other protein and fats for food is tied up with the economics of the human body as well as with the economics of the market place, it appears from a report by Dr. E. B. Forbes, emeritus professor of animal nutrition, Pennsylvania State College, at the 100th birthday celebration of the University of Buffalo School of Medicine.

Fat and protein, he reported, favor the transformation of food into body substance with less energy waste than would be supposed from the effects of individual foodstuffs. It is not surprising that fat and protein are thus economically transformed into body substance, he pointed out, since human and other animal bodies are made up mainly of fat and protein.

"A lot of people have very wrong ideas" of the effects of foods in nourishing the body, Dr. Forbes declared. The reason for these wrong ideas is that they are based on study of the effects of one class of foods fed by themselves.

The once-popular notion that meat or other proteins should not be eaten in hot weather because of their heating effects is an example of some of these wrong ideas.

Meat or other protein food which has the highest heating effect when fed by itself has the exactly opposite effect when fed in a mixed diet such as people usually eat, Dr. Forbes found from his 24year study of animal nutrition.

The same is true of fats, he found. Diets containing varying amounts of fat but supplying the same amounts of protein and energy were fed in some of his studies. The efficiency with which the energy of the complete diet was used increased as the amount of fat was increased.

The importance of all the nourishing substances in diet was stressed by Dr. Forbes.

"No one essential is more essential than another," he declared.

The maximum usefulness of each food substance and of the entire diet depends on all the body's needs for nutriment being satisfied.

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