Delay Sewing War Wounds

WAR WOUNDS in which the skin and tissues are badly torn should not be immediately sewed up, Dr. Frederic W. Bancroft, of Columbia University College of Physicians and Surgeons, warned fellow surgeons.

French army surgeons after experience in the present war all warn of the dangers of primary suture—that is, sewing up the wound the first time the surgeon sees it—in war wounds.

The ideal conditions of a healthy patient, clean skin, wound made by a relatively sharp and clean instrument, repair of the wound within six hours after it was inflicted, and opportunity for the surgeon to use meticulous care in treating the wound and to watch it during the time it is healing, are hardly likely to be found in war surgery. But unless these conditions are present, Dr. Bancroft advises against primary suture of wounds.

Science News Letter, November 2, 1940

There are 18,000 kinds of jobs, but only one young person in four leaving school or college is properly prepared for work or has any clear idea of what job he should seek, says the American Youth Commission of the American Council on Education.



WON'T BURN

Non-inflammable lath board is now on the market. (Fir-Tex Insulating Board Co.) It is made of minute flakes of a non-metallic mineral which originates in mica. These are interlaced with wood fibers so that there are millions of microscopic firewalls in each panel. A partition so constructed was tested and prevented the spread of fire from one room to another for more than an hour.

NUTRITION

U. S. Army May Eat Bread Enriched With Morale Vitamin

American Soldiers Will Continue To Be Best Fed Fighting Men; Study Enrichment of Several Foods

FEEDING soldiers of the U. S. Army bread fortified by the morale-building B vitamins, which would make them better fighters, is being considered by the Quartermaster Corps.

"American soldiers are, and will continue to be, the best fed fighting men on earth," Major Paul Logan, food expert of the Army Industrial College, assured the American Dietetic Association, meeting in New York.

Plans and experiments under way, he said, are aimed toward assuring a balanced diet to American soldiers, in peace or fighting conditions. Strain on body and nerves which modern warfare causes with its lightning speed, whirlwind devastation, and nerve-shattering machines, Major Logan said, means that an army must be fed not only enough food but all the constituents of a properly balanced diet.

"Considerable attention is now being given," he stated, "to the possibilities of enriching certain foods—such as cereals—with vitamins, particularly those of the B complex, and also with certain minerals."

Dehydrated foods are also undergoing tests. These require little space and therefore would help the Quartermaster Corps in its continual battle to ship as much food in as little space as possible.

Soldiers recently ate, and praised, a test dinner prepared entirely from dehydrated foods except for the meat and gravy, Major Logan reported. The menu, he said, included cream of tomato soup, roast beef with brown gravy, mashed potatoes, creamed carrots, cole slaw, cranberry jelly, apple and pumpkin pie.

A pound of cranberry flakes "gross weight," expands to serve 109 soldiers, whereas a pound of canned cranberry jelly represents only six and one-half servings.

While food value of the dehydrated preparations is apparently equal to that of canned foods, the army food specialist said that tests are now being conducted by the Nutrition Committee of the National Research Council to obtain accurate information as to the vitamin and

mineral values which the dried foods contain.

This nutrition committee, headed by Dr. Russell Wilder, is studying problems of vitamins and mineral sufficiency in the military diet in collaboration with the Surgeon General and the Quartermaster Corps of the Army.

Science News Letter, November 2, 1940

Americans Lack Vitamin B

THE AVERAGE American consumes too little vitamin B for grade A health, Dr. Norman Jolliffe, of the New York University College of Medicine, warned dietitians.

This vitamin, which has proved so complicated that it is now technically called the vitamin B complex, is known to contain at least 12 fractions, Dr. Jolliffe pointed out, addressing the American Dietetic Association. Five of the fractions are available in crystalline form for clinical use.

Lack of this vitamin, which occurs in such foods as milk and eggs, whole grains, liver, and some other meats and fresh vegetables, is held responsible for a variety of ills, including some cases of neurasthenia, pellagra, an eye malady, and a nervous disease which until recently was 100% fatal.

Dr. Jolliffe advised nutritionists to look out for vitamin B deficiency in diet of the following:

- 1. Low income and poverty stricken groups.
- 2. Persons with bad dietary habits and food idiosyncrasies.
 - 3. Alcoholic addicts.
- 4. Patients with diseases which alter the requirements of this vitamin.

Vigorous use of nicotinic acid, one factor in vitamin B, has spectacularly reduced mortality from 100% to 15% in the nervous disease known as encephalopathy, which is now known to be caused by acute lack of this food factor.

While not all neurasthenia is caused by too little thiamin—another fraction of vitamin B—in diet, Dr. Jolliffe stated that lack of this vitamin plays a larger role in the nerve malady than is commonly believed. As common neurasthenic symptoms of too little thiamin, he cited poor appetite, fatigue, insomnia, and often with them irritability, nausea, depression, constipation, headache, backache, "gas" and palpitation of the heart. Patients with paralysis agitans treated with still another part of the B vitamin, known as pyridoxin, have shown defi-

nite improvement, he reported.

Science News Letter, November 2, 1940

PSYCHOLOGY-PHYSIOLOGY

Air Raid Noise Not Likely To Harm Nervous System Cells

By DR. CLIFFORD T. MORGAN Harvard University

This authoritative article was prepared especially for Science Service. Dr. Morgan has been studying intensively the possible effects on the nervous system of loud noises like those of explosions or the screaming bombs which have dropped on London. He recently reported to the American Psychological Association experiments in which rats were driven into epileptic seizures by the blast of a compressed air whistle set at such a high pitch that it was inaudible except for the whishing noise of the air.

T IS unlikely that any real damage is done to the nervous system by prolonged auditory stimulation such as that to which the Londoner is exposed.

We get damage in the brain of rats only when the sound stimulation has resulted in an epileptic seizure, but this is probably due to the rupture of blood vessels in the seizure.

Such seizures seem to be peculiar to the rat and certain other infrahuman animals.

Aside from such seizures, high pitched sounds or sudden loud noises of guns produce in normal animals violent emotional responses which look like terror and which soon become associated with almost any noise so that animals which are exposed for a long time to such

sounds become extremely jumpy and may be greatly disturbed emotionally by the slightest sound.

I should expect that a good number of Londoners will be affected in this way just as were soldiers in trenches during the last war. The Germans probably got the idea of the screaming bombs from the war neuroses of this sort which were numerous in the last war.

The effect may be greatly enhanced where there are additional conditions making for terror, and it may be reduced when a satisfactory adjustment has been made to non-auditory factors in a situation.

There is evidence to support this statement in rat experiments. The jumpiness produced by sound lasts for a considerable time in some cases. It quickly disappears in other animals, especially if they are given good treatment. Such more or less permanent effects of sound exposures are without doubt associated with functional changes in the nervous system but it is extremely doubtful that any material damage is done to nerve cells.

Prolonged very intense sounds may damage the ear but I do not know whether in the case of the Londoner the sound is intense and continuous enough to do this to a significant extent.

Science News Letter, November 2, 1940

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Endurance of Loss of Sleep Tribute to Londoners' Stamina

LONDONERS could not endure the interference with sleep brought by nightly air raids and still go on with their work if they did not have splendid physical stamina and mental stability.

This is the opinion of Dr. W. A. Bousfield, of the University of Connecticut,

a psychologist who has for years been studying the effects of loss of sleep and poor sleep on morale.

"Interference with sleep suffered by Londoners in districts subject to nightly bombing must inevitably produce a chronic condition of sleep hunger with an attendant depression of mood," he said.

Experiments by Dr. Bousfield have revealed that not only quantity of sleep but also quality, regularity and continuousness are related closely to the individual's sense of well being. Interference with any one of these is sufficient to alter mood noticeably and to induce feelings of tension.

"The Londoner," he said, "allowed only short naps in an air raid shelter, loses out on all factors conducive to the full benefits of sleep.

"It requires greater effort for him to concentrate, and muscular exertion becomes more difficult.

"Only by virtue of strong motivation and emotional zeal is it possible to maintain the increased effort necessary to counteract this loss in efficiency. Many individuals respond to such a state with a compensatory hilarity, thus making the difficult situation easier to tolerate.

"That the British have been able to endure prolonged interference with their sleep is a high tribute to their physical stamina and their inherent stability."

Science News Letter, November 2, 1940

PALEONTOLOGY

Nearly Complete Fossil Of Uintatherium Found

PRIZE fossil find of the season, a nearly complete skeleton of the elephant-sized six-horned beast known as Uintatherium, that dominated the primitive forests about 30 million years ago, has been dug up in southern Wyoming by Dr. Charles L. Gazin, Smithsonian Institution paleontologist.

Bones of this strange giant mammal are common enough, but a skeleton with only a few parts missing is one of the greatest of scientific rarities. Dr. Gazin's find lacks only one hind leg, part of a foreleg, and the neck vertebrae. The yard-long skull is in exceptionally good condition, although the lower jaw is considerably crushed. There is also a second skull, including one of the beast's saber-like down-pointed tusks about a foot long.

"We were fortunate in the location of our specimen," Dr. Gazin informed Science Service. "It was in the side of a steep hill only about a quarter of a mile from a road. We ran a truck from the road up a dry creek bed right to the foot of the hill, and dragged the bones down to it on canvas. As finally boxed up and shipped to Washington, the bones filled four 500-pound cases."