MEDICINE

Quinine Not Necessary

Atabrine is just as good, and perhaps better, for the control of malaria. There is no need now for largescale production of quinine.

➤ ATABRINE is as good as quinine in control of malaria and better in some respects, there is no reason to replace it with quinine in the armed forces, and no need now for large-scale production of quinine or totaquine.

This is the substance of a resolution by the Board for the Coordination of Malarial Studies, just released through the National Research Council. Chairman of the board is Dr. R. F. Loeb, of Columbia University College of Physicians and Surgeons. Army, Navy, Public Health Service, Office of Scientific Research and Development and National Research Council representatives also serve on this board (Journal, American Medical Association, Aug. 5).

"No advantage, and possible disadvantage, would accrue to the armed forces were quinine or totaquine to replace quinacrine for the routine suppression and treatment of malaria," the resolution states.

Quinacrine hydrochloride is the official U. S. Pharmacopoeia title for atabrine, or atebrin as the board spells it in order to avoid using a trade name.

Totaquine is the U. S. Pharmacopoeia name for a mixture of the alkaloids of cinchona, the tree from which quinine is also obtained.

"The large-scale production of quinine or totaquine is not now considered a matter of importance for the management of malaria among Army and Navy personnel," the board also resolved.

A supply of totaquine in excess of present stockpiles may be needed, the board points out, for treatment of malaria among civilians in the reoccupied countries. It might not be possible to spread information on the proper use of quinacrine, or atabrine, immediately in such regions and therefore it would be more practical to supply totaquine.

"After the war the overall need for all established antimalarial drugs will continue to be great," the board adds. This seems to indicate that large-scale production of totaquine and the new laboratory-developed synthetic quinine might be favored in the future.

The board resolution, believed to be

the first official statement on malaria in the armed forces issued for some time past, is based on "controlled quantitative studies in civilian, Army and Navy establishments." According to these studies, quinacrine (atabrine) has "proved" to have all the antimalarial properties of quinine for suppressing malaria during and after exposure to infected mosquitoes.

Adverse effects, reported earlier, can be avoided by proper use of the drug. Suppression of malaria can be achieved over long periods without danger to the individual by proper use of atabrine, whereas adequate doses of quinine equivalent to those of atabrine now used by the armed forces would often produce symptoms of cinchonism, such as ringing in the ears, headache and so on.

Atabrine properly used, experience in the past two years has shown, is as effective as and safer than quinine for stopping an acute attack of malaria.

Atabrine, according to what the board terms "convincing evidence," cures the malignant form of malaria, known as falciparum, which quinine apparently does not do. Atabrine also suppresses symptoms of this type of malaria.

Science News Letter, August 12, 1944

CHEMISTRY

Rubber-lined Tank Holds Water Used in Explosives

➤ A NEW STEEL storage tank with a 43,000-gallon capacity and a one-inch wall will be used to hold highly purified water used in the manufacture of high explosives, TNT, smokeless powder, nitroglycerine and rocket powder as well as chemicals. It is completely lined with from five to seven tons of rubber, to eliminate any chance of corrosion which would contaminate the water.

The lining of the tank was accomplished by using long strips of rubber nearly a quarter of an inch thick. The rubber strips are bonded to the inside of the tank with rubber cement, then the seams are stitched by a machine to insure a perfect bonding. (Turn page)



43,000 GALLON TANK—Probably the largest rubber-lined tank, it is used for storing water necessary for the making of high explosives. The rubber lining (work of the United States Rubber Company) keeps the water from coming into contact with any metal.