Buffers in Wine Make It Slower To Cause Drunkenness

Substances Tend To Neutralize Acids and Alkalis: Taking Whisky With Soda Water Does Not Help, Though

REASON why whisky or other hard liquor makes a man drunk faster than wine is because the wine contains buffers, substances that tend to neutralize acids and alkalis, according to experiments reported by Dr. Henry Newman and Dr. Mason Abramson, of Stanford University School of Medicine (Science, July 10).

The buffers in wine, they report, slow down its absorption and consequently the time it takes for its alcohol to get into the blood.

Taking whisky with soda water or other carbonated beverages would not, however, slow its absorption by neutralizing stomach acidity, as many persons believe, because carbonated beverages are all acid themselves. The Stanford experimenters do not state whether the buffer action of the wines was in the direction of neutralizing acidity or alkalinity.

The experiments were made by measuring the alcohol in the blood of two persons after drinking alcohol, Scotch and Bourbon whiskies, gin and California Port and Burgundy wines. Enough

of each was taken so that the concentration of alcohol in each drink was 13% by volume. The drinks were taken in 10 minutes on an empty stomach.

Maximum concentration of alcohol in the blood of test drinker A was reached in 45 minutes for Scotch, gin, alcohol and Bourbon. Maximum concentration time after Burgundy was an hour and a half, after Port two hours, showing that the wine was absorbed two to three times more slowly.

Test drinker B showed no such difference in absorption of alcohol because his distinct aversion to the distilled liquors, resulting in mild nausea, disturbed his stomach so much that it interfered with the rapid absorption of these liquors. X-ray examination showed that normally there was no difference in stomach motility of the two subjects.

As further evidence that the buffers in the wine are responsible for its slower absorption into the blood, the scientists report that when straight alcohol was buffered to the same degree as the Port wine, it was absorbed at practically the same rate as the wine.

Science News Letter, July 18, 1942

Anti-Venereal Disease Program Is Intensified

ADDITIONAL measures to protect American troops against venereal disease to meet the change to a war-time status were disclosed by the War Department.

Specially qualified Medical Corps officers will carry out these measures. Supplementing the present program, a venereal disease control officer with the grade of major will be assigned to each Army camp of 20,000 or more men, each Field Army, Air Force, and Armored Force, each Corps Area or Department, General Headquarters and Headquarters, Communications Zone.

Control measures to be taken within the military commands include:

1. Supervision, coordination and improvement of the venereal disease educational program.

2. Cooperation with other military agencies in order to provide an adequate recreational program.

3. Cooperation in the provision and maintenance of adequate facilities for prophylaxis.

4. The provision of adequate physical inspections of troops to detect early such cases as may fail to report at sick call.

5. The provision, standardization and

RADIO

Saturday, July 25, 1:30 p.m., EWT
"Adventures in Science," with Watsen Davis,
director of Science Service, over Columbia Broadcasting System.

Lt. Col. L. B. Lent, chief engineer of the National Inventors Council, will discuss inventions.

National Inventors Council, will discuss inventions.

Tuesday, July 21, 7:30 p.m., EWT

Science Clubs of America programs over WRUL,
Boston. on 6.04, 9.70 and 11.73 megacycles.

Isabel Hoopes, of the New England Museum
of Natural History, will talk about "Methods of
Defense Among Reptiles."

One in a series of regular periods over this
short wave station to serve science clubs, particularly in the high schools, throughout the Americas.

Have your science group listen in at this time.

supervision of facilities for the diagnosis and treatment of military personnel.

6. Close cooperation with local civilian health authorities to insure the reporting of probable civilian sources of infection which occur among soldiers in order to assist the civilian agenies in the elimination of foci of infection.

7. The collection and detailed analysis of data concerning the incidence and sources of infections acquired in the troops of the respective organizations.

In the civilian communities the control officers will cooperate with all agencies concerned.

Science News Letter, July 18, 1942

World's Largest Propeller Is Put Through Its Paces

See Front Cover

THE ILLUSTRATION on the front cover of this week's Science News LETTER shows the new Curtiss-Wright 18-foot airplane propeller, largest in the world, undergoing tests. This propeller is larger than those of the new U.S. Army's 82-ton bomber, world's largest land plane, or those of the Navy's giant "Mars," world's largest flying boat. No Axis propeller approaches this size, so far as known. The blades are of hollow steel designed especially for high altitude flying.

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