

## Report on alcohol's health effects

A report on the health effects of alcohol has been issued to the President and Congress by the U.S. Department of Health and Human Services and the U.S. Department of the Treasury. It not only summarizes the latest scientific information about the health effects of alcohol but recommends, after meeting with medical authorities, representatives of the alcohol beverages industry and other interested parties, what can be done to inform the U.S. public about alcohol's health hazards and to safeguard the public from these hazards. Among the report's findings:

- Although moderate alcohol consumption has been associated with lower rates of heart disease than those observed for abstainers (SN: 8/13/77, p. 102), there is ample evidence that excessive drinking can hurt human health—cause liver damage (the seventh leading cause of death in the United States); increase the risk of certain cancers; interact with drugs (alcohol-drug interactions are the second most frequent cause of drug-related medical crises in the United States); cause nutritional deficiencies contributing to anemia, convulsions and even brain damage; trigger psychological depression; erode heart muscle and diminish its output; alter hypothalamic and pituitary sex hormones, resulting in reduced levels of testosterone and effeminacy; and bring about ovarian failure and early postmenopausal cessation of bleeding in women.

- Heavy drinking, and perhaps even moderate drinking, by pregnant women can endanger their unborn children. The fetal alcohol syndrome, characterized by mental retardation and other abnormalities, has been identified among some children of alcoholic women. Birth defects have also been observed in the offspring of some women who drank only two ounces of alcohol daily during pregnancy (SN: 3/26/77, p. 205). Decreased birth weight (often associated with increased risk to the newborn) has also been observed among the children of some women who drink two drinks per day during pregnancy, and in one study there was evidence of an association between two drinks a week and miscarriages (SN: 8/16/80, p. 110). Still to be answered, though, is how much a woman must drink to produce adverse effects in her unborn child, the vulnerable period for susceptibility, the effects of binge drinking and other drinking patterns on the fetus, and whether fetal injury derives from the alcohol itself or from an indirect effect mediated by maternal physiology.

- Recent evidence suggests that alcoholism may be due to genetic factors (SN: 1/6/79, p. 6), although social and environmental influences play significant roles in it. At this time much more is

known about the effects of alcoholism than about its causes.

- HHS and Treasury, with the help of the alcoholic beverages industry and other groups, should expand current efforts to educate the public about the adverse health effects of alcohol. Both HHS and Treasury should support National Highway Traffic Safety Administration programs to discourage driving while under the influence of alcohol.

- Currently there are no warning labels on alcoholic beverages as there are on cigarette packages, and legal authority to require such labels rests with Treasury or Congress. However, the report does not recommend that such warning labels be required at this time, for a number of reasons: Although warning labels on cigarettes seem to be one of the reasons cigarette smoking has declined in the United States, it is hard to determine how much of this decline came about as a result of warning labels as opposed to the Surgeon General's report, public education and banning cigarette ads on television; a general warning label on alcoholic beverages, such as "alcohol may be harmful to your health," would not convey much new information to the public, and a specific warning, such as "alcohol may be harmful to human fetuses," might cause consumers to discount the importance of other significant alcohol-related health hazards.

- The report does urge that labels informing the public as to the alcohol content of various beverages be made uniform so that people have a better idea of how much alcohol is in various beverages and can avoid excessive intake. For instance, distilled spirits should be listed by percentage of alcohol per volume as beer and wine are, not simply by proof, because many people do not know that proof is twice the alcohol content by volume. Any changes in the requirements for content labeling lie with Congress or Treasury.

What have been the reactions to the report? HHS will continue to inform the public about the health hazards of alcohol and step up its information campaign provided the funds become available, a HHS spokeswoman told SCIENCE NEWS. The alcoholic beverages industry has reacted fairly favorably to the report, a Treasury spokeswoman points out, and has already met with the department to discuss how it can better inform the public about the health hazards of alcohol. The industry is also talking with Treasury about regulatory changes so that distilled spirits must contain labels listing their percentage of alcohol per volume. Such regulatory changes would be easier to bring about than would congressional legislation implementing the same requirement. The end of the 96th Congress has precluded much reaction by that body to the report for the time being. More response is expected from the 97th Congress when it convenes in January. □

## Engineer heads NSF



On Dec. 2, John B. Slaughter (SN: 7/12/80, p. 25) succeeded Richard Atkinson as director of the National Science Foundation. Slaughter, an engineer, will guide NSF through a major reorganization (already underway) aimed at increasing funding, visibility and the integration of engineering within NSF. Explaining his agency's new tack, Slaughter recently told the Council of Scientific Society Presidents that it is time to stop artificially separating basic research from applied technology.

## Supreme Court backs EPA on '77 water law

Whether to enforce federal water-pollution-control standards should not be determined by a company's ability to afford compliance with the law, the Supreme Court ruled (8-0) last week. The case, which overturned an appeals-court ruling, involved a request by the coal and stone-quarry industries for variances from the Federal Water Pollution Control Act in cases of financial hardship.

Standards set by the Environmental Protection Agency required the industries to install "best practicable control technology currently available" by 1977 and "best available technology economically achievable" by 1987. While variances from the more restrictive 1987 limits are allowed for financial hardship, EPA prohibited variances on those grounds from the 1977 rules.

The Court pointed out that Congress knew, prior to passing the law, that pollution enforcement under it would be likely to close hundreds of "marginal" plants. The Court opinion, read by Justice Byron White, concluded that "in our view, requiring variances from otherwise valid regulations where dischargers cannot afford normal costs of compliance would undermine the purpose and the intended ... effect of the 1977 regulations." □