A Comparison of the Health Effects of Alcohol Consumption and Tobacco Use in America

By ACSH Staff — June 1, 2000

This report represents a work in progress. ACSH realizes that research in the areas of health impacts of alcoholic beverages and of tobacco products is continuing, and we will update this paper as new research and insights are received. We welcome input from readers.

Public policy makers and legislators face complex challenges when evaluating regulatory and educational approaches to the use of alcoholic beverages and tobacco products. Although the two substances are often presented as if they have similar impacts on health, an examination of the substantial differences in their health-related benefits and risks indicates that they should not be linked for regulatory or educational purposes. This paper briefly reviews:

- patterns of alcohol and tobacco use in the United States, and
- dose-related health benefits and risks.

The risk/benefit profiles of alcoholic beverage and tobacco product use are significantly different. For example, alcoholic beverage consumption can have positive health effects at low to moderate doses, at least in specific populations. The pattern of consumption is apparently as important as the quantity consumed; binge drinking carries definite health risks.

The misuse of alcoholic beverages, which is defined as the use of even small amounts of alcohol at inappropriate times, is associated with an increased risk of motor vehicle accidents. Furthermore, use of higher doses of alcohol (doses for which the term "abuse" is appropriate), is also associated with an increased risk of several diseases, violent behavior, suicide, and birth defects.

Unlike with alcohol, no important overall health benefits have been established for tobacco product use at any dosage. Any possible health benefit related to smoking involves the alleviation or prevention of diseases that are uncommon or are rarely fatal. Moreover, there is overwhelming evidence that cigarette smoking greatly increases a number of health risks, including the risk of various cancers, chronic obstructive pulmonary disease (COPD), heart disease, and stroke.

Certain health risks may also be increased even with light use of cigarettes. The use of cigarettes, pipes, and cigars, as well as smokeless tobacco, poses different health risks. Tobacco smoke puts others at risk through environmental exposure. Use of tobacco products, and the use, misuse, and abuse of alcoholic beverages pose higher risks to special populations, in particular the elderly, children, and adolescents. The use of these products can also pose risks to "passive" consumers, like developing fetuses, children, and other nonusers, through motor-vehicle and other injuries.

The significant differences in individual and public health consequences of the use of alcoholic
beverages versus those of the use of tobacco products underscore the opinion of the authors that public policy approaches to these substances should differ.

By Cheryl K. Olson, M.P.H., Sc.D., Lawrence Kutner, Ph.D.

Project Coordinator Ruth Kava, Ph.D., R.D. Director of Nutrition, ACSH

Art Director Yelena Ponirovskaya

The American Council on Science and Health gratefully acknowledges the comments and contributions of the following individuals who reviewed this work:

Dale J. Chodos, M.D. Kalamazoo, MI

Michael A. Dubick, Ph.D. U.S. Army Institute of Surgical Research, San Antonio, TX

K. H. Ginzel, M.D. University of Arkansas for Medical Science

Dwight B. Heath, Ph.D. Brown University

Richard M. Hoar, Ph.D. Williamstown, MA

Ruth Kava, Ph.D., R.D. ACSH

Lillian Langseth, Dr.P.H. Lyda Associates, Inc. Palisades, NY

Alicia Lukachko, M.P.H. ACSH

Roger P. Maickel, Ph.D. Purdue University

Eric W. Mood, LL.D., M.P.H. Yale University School of Medicine

John W. Morgan, Dr.P.H. Loma Linda University Cancer Institute

W. K. C. Morgan, M.D. University Campus London Health Sciences Centre, Ontario, Canada

Gilbert L. Ross, M.D. ACSH

Mark C. Taylor, M.D. St. Boniface Hospital Winnipeg, Manitoba, Canada

Elizabeth M. Whelan, Sc.D., M.P.H. ACSH

Joel E. White, M.D., F.A.C.R. Radiation Oncology Center Walnut Creek, CA

ACSH accepts unrestricted grants on the condition that it is solely responsible for the conduct of its research and the dissemination of its work to the public. The organization does not perform proprietary research, nor does it accept support from individual corporations for specific research projects. All contributions to ACSH—a publicly funded organization under Section 501(c)(3) of the Internal Revenue Code—are tax deductible.