## **Doctor, Should I Have a Drink?**

## An Algorithm for Health Professionals

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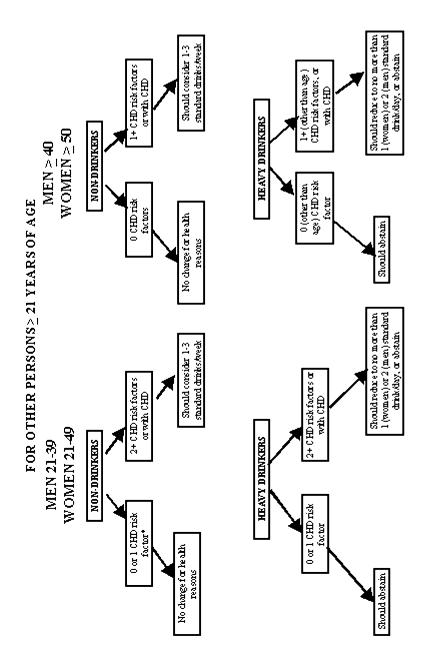
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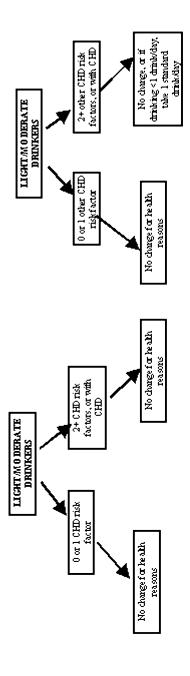
Patients are deluged with media advice, sometimes accurate but often commercial, self-serving and confusing. They may also seek or receive advice from the internet, nurses, pharmacists, dieticians, and practitioners of non-traditional medicine. The physician is often the person best qualified to synthesize the relevant information and give sound advice to his or her patient. Prevention as well as treatment of disease has always been a prime objective. Enhancement of the quality of life is also important, and often crucial to compliance.

Physicians find themselves between Scylla and Charybdis regarding alcohol consumption, conflicted by information about benefits of moderate drinking and the manifest misery which alcoholism causes. A judgment about who might benefit and who might be harmed requires a careful history and a considered explanation to the patient. Many decide simply to ignore the subject. Others choose a "one size fits all" course, advising reduced drinking or abstinence because of alcohol's potential for harm. Such approaches might potentially be harmful to the health of some individuals. They are inadequate in light of current epidemiological data about health effects of alcohol. We have devised an algorithm (see Figure 1) to assist health care professionals in advising patients about drinking.

Many studies have shown reduction of risk of fatal and nonfatal cardiovascular disease, mostly coronary heart disease (CHD) and ischemic stroke, in light/moderate drinkers. <sup>1-3</sup> This reduced risk has been observed in a wide variety of patient populations, including those with diabetes, hypertension and prior myocardial infarction. <sup>1,2</sup> Plausible mechanisms for alcohol's benefit include increased high-density lipoprotein cholesterol (HDL-C), several antithrombotic actions, and increased insulin sensitivity. Non-alcohol ingredients in some alcoholic beverages, especially red wine, offer hypothetical additional benefit, but observational data are conflicting about the role of beverage choice (wine, liquor or beer). It appears likely that all alcoholic beverage types decrease CHD risk. <sup>1-3</sup> The optimal amount of alcohol for lowest risk of CHD or death is not entirely clear, but net harm is seen in some studies when in excess of two drinks/day in men and above 1 drink/ day in women. A special consideration in women is evidence that moderate drinking increases her risk of breast cancer. <sup>4</sup>

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beer, a 4 oz glass of table wine, or a 1 1/2 oz of distilled spirits. \*Coronary Heart Disease (CHD) Risk Factors (RF)—National Cholesterol Education Program (NCEP) Guidelines: (1) FH of CHD, parent or sibling (M < 55 or F < 65); (2) smoker; (3) hypertension; (4) diabetes; (5) total cholesterol at least 200; HDL cholesterol less than 35 (if greater than 60, subtract one RF); (7) age (already included). FIGURE 1. An algorithm for health professionals for advice on moderate alcohol drinking for health. Exclusions: (1) persons less than 21 years of age; (2) pregnant women; (3) nondrinkers avoiding alcohol owing to family history (FH) of alcoholism or religious/moral reasons; (4) nondrinkers with personal history of alcohol problems; (5) nondrinkers with known organ damage from alcohol, any chronic liver disease, or evident genetic risk of breast/ovarian cancer. "Moderate" is defined as not more that one standard drink/day for women and not more than two standard drinks/day for men. "Heavy" is in excess of three drinks/day for men and in excess of two drinks/day for women. A standard drink is a 12 oz. bottle/can of

What advice should be given the patient? Cessation of smoking, control of weight, hypertension and diabetes, lipid management by diet, exercise and drugs remain the cornerstones of CHD prevention. After these basics, alcohol should be considered. For persons at above average CHD risk, alcohol abstinence, except for special reasons, is not best. The special reasons include high risk of alcoholism (always in need of individual assessment), pregnancy, liver disease, increased genetic risk of breast cancer, 4 certain medications, and religious/moral reasons for abstinence. Heavy drinkers judged to be addicted should be counseled to abstain. Some heavy drinkers who can control their drinking might be advised to decrease to one or two drinks per day. Non-drinkers who were former light drinkers with no addiction problems should be advised to resume drinking for health reasons if they have at least two risk factors for CHD and no reason for exclusion, and those with 0-1 CHD risk factors should be told the options and to drink at their discretion. Nondrinkers older than 40 years (men) or 50 (women) who have 1+ CHD risk factors should be advised to consider taking 1-3 standard drinks per week, as should younger men and women who have at most 2+ CHD risk factors. Some will feel that these recommendations are controversial, but we believe them justified by the epidemiological data.

We recommend taking the patient through the algorithm (Fig. 1) either in person or utilizing the patient's history to reach a decision on advice. Note exclusions, definitions of levels of drinking, and the definition of a standard drink. How and where one drinks are also important. Drinking before driving or operating machinery is clearly unwise. Drinking alcohol with food may enhance its healthful effects. Reduction of CHD is optimal when one or two standard drinks are consumed on five or six days of the week.<sup>5</sup>

We believe that we have reached a time when physicians and other health professionals can offer their patients objective, sound, evidence-based information on alcohol and health.

## REFERENCES

- PAOLETTI, R., A.L. KLATSKY, A. POLI & S. ZAKHARI, Eds. 2000. Moderate Alcohol Consumption and Cardiovascular Disease. Kluwer Academic Publishers. Dordrecht, the Netherlands.
- KLATSKY, A.L. 2001. Editorial: Should patients with heart disease drink alcohol? JAMA 285: 2004–2006.
- 3. CORRAO, G., L. RUBBIATI, V. BAGNARDI, et al. 2000. Alcohol and coronary heart disease: a meta-analysis. Addiction 95: 1505–1523.
- 4. LONGNECKER, M.P. 1994. Alcoholic beverage consumption in relation to risk of breast cancer: meta-analysis and review. Cancer Causes Control **5:** 73–82.
- MCELDUFF, P., & A.J. DOBSON. 1997. How much alcohol and how often? Population based case-control study of alcohol consumption and risk of a major coronary event. Br. Med. J. 314: 1159–1164.