

## Encyclopedia of Reproductive Technologies

Work has begun on the single-volume *Encyclopedia of Reproductive Technologies*, to be edited by me and published by Garland Publishing, Inc. (New York).

This is a combined sociologic and technical reference book in which techniques, scientific and medical terms etc. are put in the context of sociologic and historical settings. It is meant to be fully accessible to undergraduates and researchers, including those who do not necessarily work in the sciences.

The text aims to be as inclusive as possible regarding the various perspectives on reproductive technologies as they relate to women, sexuality, race, class and physical abilities.

We are looking for papers to be included in this volume. Enquiries should be sent to the address below.

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## Alcohol metabolism

Alcohol metabolism follows dose-dependent Michaelis-Menten (zero-order) kinetics.<sup>1</sup> However, variability in the rate of alcohol elimination is associated not only with the pattern of consumption (i.e., dose and dosing interval) but also with variables such as age, total body water, hepatic function and racial group. Hence, it is often difficult to determine

the rate of metabolism for specific patients.

In providing a forensic psychologic assessment for an 18-year-old Canadian Indian it became necessary to determine his rate of alcohol metabolism. On the basis of sequential breathalyzer analyses this was determined to be about 35 mg/dL per hour, significantly higher than rates previously reported for people of similar age (23 mg/dL per hour).<sup>2</sup> Other studies<sup>3</sup> that examined Indians consuming an average Canadian diet who were heavy drinkers (mean age 39 years) found similar lower rates of alcohol metabolism (21 mg/dL per hour).

Whether our findings indicate that young aboriginal males who are heavy drinkers have a higher rate of alcohol metabolism than has generally been reported for other groups or whether this patient is a "statistical outlier" remains to be determined. However, our observation should increase appreciation of the variance in alcohol metabolism among groups of patients and the resultant potential importance in relation to social, psychologic, physical and forensic assessments.

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## References

1. Pagliaro LA, Benet LZ: Critical compilation of terminal half-lives, percent excreted unchanged, and changes of half-life in renal and hepatic dysfunction for studies in humans with references. *J Pharmacokinetic Biopharm* 1975; 3: 333-383
2. Devgun MS, Dunbar JA: Alcohol consumption, blood alcohol level and the relevance of body weight in experimental design and analysis. *J Stud Alcohol* 1990; 51: 24-28

3. Fenna D, Mix L, Schaefer O et al: Ethanol metabolism in various racial groups. *Can Med Assoc J* 1971; 105: 472-475

## Hockey helmets instead?

I strongly support the CMA program encouraging the use of safety helmets for cyclists (*Can Med Assoc J* 1992; 146: 1608-1609). My initial thoughts are that the forces and impacts involved in hockey are similar to those that may be experienced by cyclists, and I wonder whether hockey helmets meet the necessary standards.

Many parents may balk at the price of a bicycle helmet (even with the recent discount program), whereas most Canadian households already own one or more hockey helmets.

Chris R. Clarke, MD  
Toronto, Ont.

[The CMA responds:]

Hockey helmets can be used, but they are not as efficient. The force to the brain resulting from a fall off a bicycle is greater than that resulting from collision with the boards (considered to be the hockey accident resulting in the greatest impact to the brain). Thus, a cyclist wearing a hockey helmet would run a greater risk of injury from a high-impact blow to the head than if he or she were wearing a bicycle helmet.

In addition, hockey helmets have little or no ventilation and would probably be far less comfortable on a hot summer's day.

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