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Properties of Bilirubin UDP-Glycosyltransferases

JOHAN FEVERY, JAN DE GROOTE and KAREL P. M. HEIRWEGH
The seven chapters of this volume of Frontiers of Gastrointestinal Research reflect the progress made in hepatic enzymology.
The liver microsomal hydroxylation enzyme system is reviewed in considerable detail. This system, so intimately linked to the metabolism of drugs by the liver, is a matter of considerable medical and environmental importance.

Significant changes have occurred within the past few years in the appreciation of vitamin D and associated metabolites. In the second chapter the effects of enzyme-inducing agents on vitamin D metabolism are discussed in the light of current theories.

The role of 5'-nucleotidase in gastroenterology is reviewed in chapter three. This enzyme, or this group of enzymes, is closely connected to physiologic and pathophysiologic conditions in the liver as well as other tissues. In this chapter attention is also called to the risks of placing too great a value on a single biochemical determination, especially when the true significance of this determination is debatable.

Alkaline phosphatase has been, and is being used extensively in clinical practice. In chapter four the current knowledge is placed in perspective against its clinical application.

Progress in the understanding of hepatic alcohol metabolism has been significant during the past few years. In chapter five the intricate relationships of alcohol metabolism and the hepatic enzyme systems are depicted. In chapter six the behavior of hepatic tumor cells is reviewed. The variation of metabolic activities, especially as it affects the various enzyme systems, is discussed in considerable detail. Although much has been learned, it is also obvious, as the authors point out, that much of the metabolic behavior of these tumors remains an enigma.

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In the final chapter the current theories on hepatic bilirubin metabolism are discussed. Changes have occurred in these theories within the past few years. Both the researcher and the clinician ought to be cognizant of these changing concepts.

Although not complete in every detail, an undertaking beyond the scope of this publication, the material contained in this volume, together with the liberal reference material, should provide the reader with a good understanding about current concepts in the various aspects of hepatic enzymology.

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