# Clinical Detective Stories

**A Problem-Based Approach to Clinical Cases in Energy and Acid-Base Metabolism**

M L Halperin and F S Rolleston

This book is written for students who want to apply fundamental concepts of energy and acid-base metabolism to clinical problems. It uses more than 50 clinical cases, with data obtained in the hospital setting, to introduce each set of concepts, and to provide the basis for discussion of the needed biochemistry and physiology. Questions and commentary drawn from human and veterinary medicine provide a broad scope for understanding the concepts presented; details of metabolism are presented only when they are necessary to an understanding of clinical medicine.

**Contents**
- Energy and Acid-Base Physiology: Energy metabolism; fuels, organs, pathways and controls; Acid-base metabolism: production and excretion of wastes.
- Clinical Applications: Energy metabolism in exercise; Diabetes mellitus; Hypoglycemia; Metabolic acidosis.
- Metabolic Function and Control: Introduction to metabolic pathways and control mechanisms; The carbohydrate system; The pyruvate dehydrogenase system; The ATP generation system; The fat system; The protein system.
- Discussion of Questions. Structure and Pathways

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John W Hallett, Jr, Director of Education, Mayo Clinic

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R J Beynon

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