Artificial Nutrition Support in Clinical Practice
Second Edition

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Preface

The first edition of *Artificial Nutrition Support in Clinical Practice* was devised as an authoritative text for clinical practitioners who considered nutrition support to be a key part of medical therapy for hospitalized patients. Its precursor, *Nutrition Support: Theory and Practice* by the same authors ran to 25,000 copies and briefly introduced the main issues in parenteral and enteral nutrition to a wide audience. At that time, several excellent American texts had dealt with the same issues, in particular the incidence of hospital malnutrition. The editors felt that with the growth of nutrition support in Europe and Southeast Asia, there was a need for a more global approach. Practices differ from country to country and the first edition therefore covered fundamental aspects of the injury response and how nutrition support could be provided to patients in each major disease category. Not only was the need to feed patients defined but the techniques for doing so were described in detail. Thus, the reader could access authoritative accounts of, for example, the impact of disease on protein and energy metabolism as well as descriptions of techniques for intravenous and enteral tube feeding. We felt that it was also important to describe the pharmaceutical principles which underpin total parenteral nutrition (TPN) in order to put the technique into the context of nutrition support teams, where it rightly belongs.

In this new edition, authors have updated their contributions. All have been invited to provide a synthesis of underlying aspects of the disease process and how they inform clinical choices on the most appropriate methods of feeding. Furthermore, each chapter is evidence-based by referring to key clinical studies whose research technique has been able to provide answers to questions of practice.

Clinical nutrition support has advanced since the first edition and new chapters deal with the role of cytokine-driven metabolism in determining nutritional requirements (Chapter 5), the effect of disease on appetite (Chapter 13), creative application of hospital catering (Chapter 15), nutrition support in pancreatitis (Chapter 40) and whether nutrition support is cost-effective (Chapter 41). This contentious issue is vigorously debated in relation to choice of TPN or enteral nutrition where cost is perceived to be a real issue (Chapter 42). Authors have worked hard to produce authoritative and interesting contributions and have the editors’ thanks for rising to the challenge.

*Artificial Nutrition Support in Clinical Practice* had its genesis in a small pocketbook, which comprised journal reviews originally commissioned by Professor Mike Rennie in 1989. In turn, the first edition has led to the establishment of the first European MSc in Clinical Nutrition in 1995 at University of Surrey Roehampton. The book became the curriculum for this MSc which poses two questions: -

What is the effect of disease on nutrition status?
What impact does nutrition support have on disease progression and outcome?

Research performed by students and their shared clinical expertise, together with the clinical experience of the editors has informed this new edition.

Regrettably, we have lost two dear colleagues and friends since the first edition was published. Dr Roger Rees, a gastroenterologist, had a deep and abiding interest in energy requirements and how these could best be met by enteral or parenteral feeding. Professor Mike Barnett, a pharmacist, pioneered new methods for testing the stability of existing all-in-one TPN regimens in order to devise guidelines for the safety of new formulations. This edition is dedicated to their memory.
We would also thank those who were involved in production of this edition. The team at Greenwich Medical Media have worked hard and creatively, most notably Gavin Smith, Gill Clark, Nora Naughton and Sam Gear.

JJP-J, GKG, DBAS
London
2001
The adverse effects of malnutrition have been known since ancient times, and the importance of good nutrition in recovery from disease emphasised repeatedly over the years from the time of Hippocrates to the writings of John Hunter in the 18th and Florence Nightingale in the 19th Century. Authors such as David Cuthbertson, Moore, Wilkinson, Kinney and Hill have given us greater understanding of the metabolic changes which take place with trauma and illness and laid the foundations of modern clinical nutrition. Pioneers such as Wretland, Rhoads and Dudrick have given us the tools with which to feed patients with gastrointestinal failure, in the same sense that ventilators and dialysis machines allow us to manage respiratory and renal failure. The newer techniques of enteral feeding are now a far cry from the eel skin and pig’s bladder used by Hunter in the 18th Century. This new science and technology has given fresh impetus to the subject, so that nutrition is beginning to find its rightful place in the undergraduate and postgraduate curriculum and to be recognised as an important sub-specialty.

The Editors of this book are to be congratulated on their important contribution to this process. This second edition, with its international cast of distinguished authors, will be an essential reference work for all those engaged in the nutritional care of patients. It is not just to the specialty of clinical nutrition that the book is addressed, however. It has something for all clinicians, nurses and other disciplines involved in the care of patients or the feeding of the sick. It emphasises standards of good practice in which all patients should be screened for nutritional status in the same way that vital signs and blood pressure are recorded routinely. It emphasises the responsibility which we all have to detect and treat malnutrition which, if neglected, causes so much morbidity, mortality and increased health care costs. It sets standards of practice which will form part of clinical governance and the quality of care in the future.

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