

## 1983 BIBLIOGRAPHY

# A KEY TO THE LITERATURE OF TOTAL PARENTERAL NUTRITION

by Jay M. Mirtallo

**ABSTRACT:** Parenteral nutrition is a relatively young science; texts dealing with the subject are few in number and become outdated shortly after publication. This comprehensive bibliography is intended to enhance the education of the practitioner and student in the area of parenteral nutrition and, as such, function as a key to the literature. Pertinent review articles may provide a mechanism for the practitioner to develop a baseline knowledge of nutritional support or specific patient problems.

*Drug Intell Clin Pharm* 1983;17:189-200.

**KEY WORDS:** total parenteral nutrition, bibliography.

SINCE THE PIONEERING WORK of Dudrick, parenteral nutrition has generated great interest and enthusiasm concerning the nutritional support of the hospitalized patient. Nutrition support services have been advocated as the optimal method in providing nutritional support. The services include the expertise of physicians, nurses, dietitians, and pharmacists, as well as ancillary health care personnel such as social workers, physical therapists, and psychologists.

An area of concern for the practitioner is becoming knowledgeable in the area of nutrition and, in particular, parenteral nutrition. Parenteral nutrition is a relatively young science; texts dealing with the subject are few in number and become outdated shortly after publication. The purpose of this bibliography is to enhance the education of the practitioner and student in the area of parenteral nutrition and, as such, function as a key to the literature. Pertinent review articles (highlighted by an asterisk) may provide a mechanism to develop a baseline knowledge of nutritional support. Also, specific patient problems, such as hypophosphatemia or catheter sepsis, may be investigated more efficiently. As a corollary, the bibliography may have an application to educational experiences: it could be easily adapted to programmed or module teaching methods.

The bibliography is divided into general categories (Table 1). The section dealing with nutritional requirements is intended to be used for decision-making regarding the parenteral nutrition formula and cites references relating to the clinical usefulness of the various intravenous nutrients. Categories relating to specific areas of nutritional support are then outlined. Of particular interest to the pharmacist is the section "Pharmacotherapy in Nutritional Support"; it is intended to alert the pharmacist to specific drug-parenteral nutrition

JAY M. MIRTALLO, M.S., R.Ph., is Clinical Pharmacist, Department of Pharmacy, University Hospitals, and Assistant Clinical Professor, Division of Pharmacy Practice, College of Pharmacy, The Ohio State University, Columbus, OH 43210.

interactions. This section also contains reviews concerning drug disposition in subjects with altered states of nutrition.

The articles in this bibliography were selected because they have been useful to our Nutritional Support Service in providing background material for a review of the subject area; they are referred to routinely in the nutritional care of patients. Some articles were included for their new or unique perspective relating to nutrition support.

It is desired that this bibliography serve as a tool by which our nutritional support service may achieve its clinical, educational, and research objectives. ≡

### History/Experience

1. Kaminski MV, Stolar MH. Parenteral hyperalimentation—a quality of care survey and review. *Am J Hosp Pharm* 1974;31:228-35.
2. Felig P. Intravenous nutrition: fact and fancy. *N Engl J Med* 1976;294:1435-6.
- \*3. Bistran BR, Blackburn GL, Vitale J, et al. Prevalence of malnutrition in general medical patients. *JAMA* 1976;235:1567-70.
4. Dudrick SJ. The genesis of intravenous hyperalimentation. *J Parenter Enter Nutr* 1977;1:23-9.
5. White PL, Selvey N. Nutrition: a medical, political, and public issue. *JAMA* 1979;241:1407-8.
6. Blackburn GL. Hospital malnutrition—a diagnostic challenge. Dr. Osler, where are you? *Arch Intern Med* 1979;139:278-9.
7. Rhoads JE. Development of surgical nutrition at the University of Pennsylvania. *J Parenter Enter Nutr* 1980;4:464-6.
- \*8. Elliott J. Squaring off over total parenteral nutrition. *JAMA* 1980;243:1610-6.
9. Page CP, Clifton U. Man the meal-eater and his interaction with parenteral nutrition. *JAMA* 1980;244:1950-3.
10. Steffee WP. Malnutrition in hospitalized patients. *JAMA* 1980;244:2630-5.
11. Kaminski MV. Humanism in hyperalimentation. *J Parenter Enter Nutr* 1981;5:1-6.
12. Rhoads JE, Vars HM, Dudrick SJ. The development of intravenous hyperalimentation. *Surg Clin North Am* 1981;61:429-35.
13. Fabri PJ, Ruberg RL. Controversies in hyperalimentation. *Hosp Form* 1982;17:50-6.
- \*14. Moore FD. Delayed scientific hypersensitivity. *J Parenter Enter Nutr* 1982;6:1-2.
15. Seltzer MH. Specialized nutrition support: the standard of care. *J Parenter Enter Nutr* 1982;6:185-90.
16. Nestle M. Nutrition instruction for health professions, students and practitioners: strategies for the 1980s. *J Parenter Enter Nutr* 1982;6:191-3.

### Reviews

17. Law DH. Current concepts in nutrition. Total parenteral nutrition. *N Engl J Med* 1977;297:1104-7.
18. Reinhardt GF, DeOrto AJ, Kaminski MV. Total parenteral nutrition. *Surg Clin North Am* 1977;57:1283-301.
19. Wretling A. Parenteral nutrition. *Surg Clin North Am* 1978;58:1055-70.

Table 1. Total Parenteral Nutrition Bibliography—Key

	REFERENCE
History/experience	1-16
Reviews	17-27
Nutritional requirements	28-42
albumin	43-53
amino acids	54-67
carbohydrates	68-70
fluids/electrolytes	
calcium	71-73
magnesium	74-75
phosphates	76-81
potassium	82-84
sodium	85-91
water metabolism	92-96
intravenous fat emulsions	
calorie source	96-101
essential fatty acid deficiency	102-109
metabolic effects	110-112
trace elements	113-119
chromium	120-121
copper	122-124
intravenous solution containments	125-129
iron	130-134
selenium	135-138
zinc	139-148
vitamins	149-161
Nutrition in specific diseases	
cancer	162-192
cardiac cachexia	193-196
gastrointestinal disorders	197-210
liver disease	211-223
pancreatitis	224-225
pregnancy	226-233
renal failure	234-243
dialysis	244-256
essential amino acids	257-267
ketoanalogs	268-271
urea kinetics	272-273
sepsis	274-283
trauma/injury	284-307
Intravenous formulations/administration	308
compatibility	309-320
cyclic hyperalimentation	321-324
filters	325-330
peripheral parenteral nutrition	331-341
stability	342-349
Enteral nutrition	350-364
Home parenteral nutrition	365-388
Complications	
infections	389-409
microbial growth in TPN solutions	410-420
miscellaneous	421-448
subclavian vein thrombosis	449-457
Metabolic effects	458-493
acid-base disorders	494-503
biochemical alterations	504-512
immune function	513-521
Team approach	522-527
Pharmacotherapy in nutritional support	
drug alterations of nutritional support	528-545
drug disposition in malnutrition	546-557

20. Ota DM, Imbembo AL, Zuidema GD. Total parenteral nutrition. *Surgery* 1978;83:503-20.

21. Lokey H, Hitt D, McMahan JJ. A hyperalimentation manual for the small hospital. *Surg Clin North Am* 1979;59:411-40.

22. Dudrick SJ. A clinical review of nutritional support of the patient. *J Parenter Enter Nutr* 1979;3:444-51.

23. Fischer JE. Hyperalimentation. *Med Clin North Am* 1979;63:973-83.

24. Shils ME. Principles of nutritional therapy. *Cancer* 1979;43:2093-102.

25. Mitchel L, Serrano A, Mart RA. Nutritional support of hospitalized patients. *N Engl J Med* 1981;304:1147-52.

\*26. Fischer JE. Panel report on nutritional support of patients with liver, renal, and cardiopulmonary diseases. *Am J Clin Nutr* 1981;34:1235-45.

\*27. Phillips GD, Odgers CL. Parenteral nutrition: current status and concepts. *Drugs* 1982;23:276-323.

### Nutritional Requirements

\*28. Rutten P, Blackburn GL, Flatt JP, et al. Determination of optimal hyperalimentation infusion rate. *J Surg Res* 1975;18:477-83.

\*29. Blackburn GL, Bistrian BR, Maini BS, et al. Nutritional and metabolic assessment of the hospitalized patient. *J Parenter Enter Nutr* 1977;1:11-22.

30. Seltzer MH, Asaadi M, Coco A, et al. The use of a simplified standardized hyperalimentation formula. *J Parenter Enter Nutr* 1978;2:28-30.

31. Shizgal HM. Symposium on nutritional requirements of the surgical patient 1. Nutrition and body composition. *Can J Surg* 1978;21:483-8.

\*32. Long CL, Blakemore WS. Energy and protein requirements in the hospitalized patient. *J Parenter Enter Nutr* 1979;3:69-71.

\*33. Long CL, Schaffel N, Geiger JW, et al. Metabolic response to injury and illness: estimation of energy and protein needs from indirect calorimetry and nitrogen balance. *J Parenter Enter Nutr* 1979;3:452-6.

34. Benotti P, Blackburn GL. Protein and caloric or macronutrient metabolic management of the critically ill patient. *Crit Care Med* 1979;7:520-5.

35. Elwyn DH. Nutritional requirements of adult surgical patients. *Crit Care Med* 1980;8:9-20.

36. Shizgal HM, Forse RA. Protein and caloric requirements with total parenteral nutrition. *Ann Surg* 1980;192:562-9.

37. Kirkpatrick JR, Dahn M, Hynes MJ, et al. The therapeutic advantages of a balanced nutritional support system. *Surgery* 1981;89:370-4.

38. Wolfe BM, Chock E. Energy services, stores, and hormonal controls. *Surg Clin North Am* 1981;61:509-18.

39. Barot LR, Rombeau JL, Feurer ID, et al. Caloric requirements in patients with inflammatory bowel disease. *Ann Surg* 1982;195:214-8.

40. Qubbeman EJ, Ausman RK, Schneider TC. A reevaluation of energy expenditure during parenteral nutrition. *Ann Surg* 1982;195:282-6.

41. Baker JP, Detsky AS, Wesson OE, et al. Nutritional assessment. A comparison of clinical judgment and objective measurements. *N Engl J Med* 1982;306:967-72.

42. Smith RC, Burkinshaw L, Hill GL. Optimal energy and nitrogen intake for gastroenterological patients requiring intravenous nutrition. *Gastroenterology* 1982;82:445-52.

This is a shortened version of the article. The entire article is available at: [www.hwbooks.com/pdf/appendices/140058a.pdf](http://www.hwbooks.com/pdf/appendices/140058a.pdf).