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## Symposium on Nutrition in Surgery

IN THIS issue will be found a group of papers by individuals who have played an important part in extending the surgeon's knowledge of the problems of nutrition in patients with surgical disease. Historically, the surgeon's interest in parenteral fluids was in large measure responsible for much of our recent advances in the science of nutrition. In addition, the significant advances that have been made in the better preparation of the patient for operation, and more adequate support of the patient during and after operation, have added greatly to a reduction in the morbidity and mortality from major surgical procedures. The common factors of anemia, hypoproteinemia, avitaminosis, and other nutritional inadequacies are found to a variable degree in nearly all patients presenting themselves with major surgical lesions, especially of a chronic nature. It is clearly of great importance that every effort be made to correct these deficiencies prior to subjecting the patient to anesthesia and operation.

The surgeon often has no time to waste in getting the patient prepared to a maximum extent possible for such operative procedures as are necessary. For this reason, he resorts to the transfusion of blood and plasma in anemia, and in certain instances of hypoproteinemia. The development of hypoproteinemia is dependent upon many circumstances. It is, in part, due to an inadequate intake of foodstuffs, in part to an extravagant loss of protein in the stool during periods of diarrhea, to impaired digestion and absorption, to impaired protein synthesis, and to increased catabolism. Hypoproteinemia has come to be recognized as a deficiency in a broad sense, and as such it indicates a general depletion of body protein.

There are many reasons why the patient's nutritional status is of prime consideration to the surgeon. The undernourished patient has an increased tendency to develop shock during anesthesia and operation. He has an increased tendency to serious disorders of the liver and to faulty wound healing, and, at times, to an increase in the time necessary for a bolus to pass from the stomach to the rectum. Furthermore, the patient with hypoproteinemia is more susceptible to infection because of a



decrease in antibody formation, and thus one important biological factor in the control of infection is impaired.

Although the clinical signs of vitamin deficiency are frequently absent, it is reasonable to assume that in patients with prolonged illness, and a history of prolonged faulty dietary intake, a subclinical vitamin deficiency must, indeed, exist.

Our recent better understanding of the nutritional problems of our patients has permitted more extensive operative procedures under prolonged periods of anesthesia with the very desirable reduction in the morbidity and mortality from these operative procedures—a goal to which the modern surgeon is devoted. Because the experiences of active workers in the field of nutrition as applied to surgery might be of practical value to all clinicians, a group has been invited to present their current views. It is hoped that this Symposium will add materially to the knowledge of those who read it. The editor wishes to thank all those who have participated in making this special issue of the *American Journal of Clinical Nutrition* possible.

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