PERI-OPERATIVE NUTRITION IN CRITICALLY ILL SURGICAL PATIENTS

An Essay

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بسم الله الرحمن الرحيم

قَالُواْ سبحانك لاَ عِلْم لَنا إِلا ما علمتنا إِنك أَنت الْعلِيم الْحكِيم

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LIST OF ABBREVIATIONS

ACAA	Aromatic chain amino acids
ARDS	Acute respiratory distress syndrome
ARF	Acute renal failure
BCAA	Branched chain amino acids
BMI	Body Mass Index
CHI	Creatinine –height index
COPD	Chronic obstructive pulmonary disease
CPN	Central parenteral Nutrition
CRF	Chronic renal failure
CRS	Catheter related sepsis
CVP	Central venuos pressure
ECW	Extracellular Water
EN	Enetral Nutrition
ESRD	End stage renal disease
GERD	Gasro-esophageal reflux disease
GFR	Glomerular filtration rate
ICW	Intracellular Water

IONIP	Inadequate oral nutrient intake period
MOFS	Multiple organ failure syndrome
NG	Naso-gastric
NRI	Nutrition Risk Index
PCM	Protein caloric malnutrition
PEG-J	Percutaneous endoscopic gastro-jejunostomy
PEJ	Percutaneous endoscopic jejunostomy
PICC	Peripherally inserted central catheter
PNI	Prognostic Nutrition Index
PPN	Peripheral parenteral Nutrition
RRT	Renal replacement therapy
SGA	Subjective Global Assessment
SIRS	Systemic inflammatory response syndrome
SNS	Specialized nutrition support
TBW	Total body water
TNF	Tumor necrosis factor
TPN	Total Parenteral Nutrition
UBW	Usual Body Weight

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INTRODUCTION

Despite the intuitive value of nutrition in the peri-operative period, it is often neglected or not appropriately used in the critically ill surgical patients who are often undernourished or even malnourished (**Bennenkade *et al.*, 2005**).

The reasons for this appear to be clinical inertia, difficulties in attaining nutritional goals especially via the enteral route, and reluctance to use the parenteral route. Furthermore, the physiologic effects of malnutrition do not become clinically apparent until a significant negative nitrogen balance has been reached. Earlier, more subtle and accurate nutritional assessments are not always reliable and require special laboratory support, equipment, and personnel that may not be available (**Krishnan *et al.*, 2003**).

Malnutrition is associated with increased morbidity, infections (particularly blood stream infections), and mortality. In contrast, adequate nutrition is associated with improved clinical outcome (**Martin *et al.*, 2004**).