

# Summary

## **Nutritional Assessment, Requirements, and Monitoring in Critically ill Patients**

The aim of this study is to discuss how to protect starved critically ill patients in ICU and relationship between nutritional status and host defenses that allow physicians to conclude early nutritional intervention, so to fulfill this aim six items was discussed :

### **1. Nutritional requirements for different groups :**

In this item we discuss nutritional therapy which may influence the clinical course by affecting the rate of protein loss and therefore strength of endogenous protein, and also caloric infusions which provide essential substrate for oxidative phosphorylation to maintain normal body homeostasis.

### **2. Body fluids and electrolytes distribution and requirements :**

In this item we discuss normal body fluid compartments, available electrolyte solution nutritional solutions, their maintenance and how to use them.

### **3. Protein and fuel metabolism during starvation and illness :**

In this item we discuss how protein synthesis affect integrity of immune system, skeletal muscle and also hepatic protein synthesis capacity.

#### **4. Selection of patient in need for nutritional support and timing of nutritional intervention :**

In this item we discuss if the patient is conscious and can tolerate oral diet, then that diet is given.

This item discuss indication of both enteral and parenteral nutrition and timing of nutritional intervention.

#### **5. Organization of nutritional devices :**

This item discuss technical details of entry to GI tract and technical of parenteral nutrition, and also complication of both enteral and parenteral nutrition.

#### **6. Monitoring of nutritional support :**

This item discuss nutrition assessment that identifies preexisting malnutrition which allow the clinician to customize the nutrition regimen according to patients needs.