**Abstract**

Nutritional metabolic management, together with other treatment and support measures used, is one of the mainstays of the treatment of septic patients. Nutritional support should be started early, after initial life support measures, to avoid the consequences of malnutrition, to provide adequate nutritional intake and to prevent the development of secondary complications such as superinfection or multiorgan failure. As in other critically ill patients, when the enteral route cannot be used to ensure calorieprotein requirements, the association of parenteral nutrition has been shown to be safe in this subgroup of patients. Studies evaluating the effect of specific pharmaconutrients in septic patients are scarce and are insufficient to allow recommendations to be made. To date, enteral diets with a mixture of substrates with distinct pharmaconutrient properties do not seem to be superior to standard diets in altering the course of sepsis, although equally there is no evidence that these diets are harmful. There is insufficient evidence to recommend the use of glutamine in septic patients receiving parenteral nutrition. However, given the good results and absence of glutaminerelated adverse effects in the various studies performed in the general population of critically ill patients, these patients could benefit from the use of this substance. Routine use of omega-3 fatty acids cannot be recommended until further evidence has been gathered, although the use of lipid emulsions with a high omega-6 fatty acid content should be avoided. Septic patients should receive an adequate supply of essential trace elements and vitamins. Further studies are required before the use of highdose selenium can be recommended.

**Keywords**

Sepsis, Septic shock, Glutamine, Arginine.