Introduction:
Fluids are a cornerstone of the management of critically ill patients who are at risk of multiple organ dysfunction syndrome. However positive fluid balance (FB) is associated with worse morbidity and mortality in these population, so fluid administration needs to be carefully titrated and the nutritional support products must be taken in consideration.

Objective: Evaluate the impact of nutritional support in the fluid balance in a Intensive Care Unit

Methods:
Observational prospective study, conducted in eleven Portuguese ICUs of nine general hospitals. Patients with 18 years of age or older were eligible if they were ventilated and had a length of stay (LOS) in ICU greater than 7 days. Demographic data, fluid balance along type of nutritional support used in the first 7 days and were collected from the selected patients.

Results:
130 patients were enrolled, 63.8% were male, the median age - 64±16 (19-91), ICU LOS - 15.4±6.1 days, mortality rate of 26.9% (35). 70 % of patients were admitted for medical reasons, 31.5% had normal weight, the remaining patients were either overweight or obese. The average daily FB in the eight days was 258 ± 464 ml, being the maximum at day 1 with +1152 ml, slowly trending down reaching a neutral balance at day 4 and reaching -224 ml at day 7. In the first days the majority of the intake is due to resuscitation driven fluids, however the nutritional support contribution rises as the days passes, reaching 25% at day 4 and 35% at day 7. Regarding the administration route, the enteral route was responsible to 28,9% of fluids at day 7 compared to 6.5% of parenteral route.

Conclusion:
The nutritional support is an factor to take into account regarding fluid balance in Intensive Care Units. In this study after the 4th day the nutritional support, it was responsible for more than 25% of the total volume that was delivered to the patient and with an higher impact with the increase in LOS
The contribution of nutritional support (enteral and parenteral) and fluids regarding the overall intake per day.