

APPLICATION FOR CRITICAL OR SURGICAL PATIENTS

Faria, S. L., *et al* (2012). Energy Expenditure Before and After Roux-en-Y Gastric Bypass. *Obesity surgery*, 1-6.

Body composition were assessed using InBody before and after the Rouxen-Y Gastric Bypass (RYGB). Resting metabolic rate (RMR) adjusted for body weight was negatively correlated to the percent body fat preoperatively and postoperatively and was positively correlated to the fat-free mass percentage (%FFM) both preoperatively and postoperatively. InBody may be used as an effective postoperative tracking tool for patients undergone RYGB.

Kaido, T., *et al* (2010). Impact of pretransplant nutritional status in patients undergoing liver transplantation. Hepato Gastroenterology-Current Medical and Surgical Trends, 57(104), 1489.

Preoperative body cell mass (BCM) levels were closely related to the postoperative clinical course in patients undergoing LDLT. Pre-transplant nutritional status and supplementation with BCAA-enriched nutrient mixture have potent impacts on the incidence of postoperative sepsis. BCM is consist of intracellular water and protein mass which can preferably measured by BIA device. The research was conducted by using InBody as a BCM measurement tool.

Kaido, T., *et al* (2012). **Pre-and perioperative factors** affecting infection after living donor liver transplantation. *Nutrition*, 28(11), 1104-1108.

It is important to take care nutrition status for the patient who are about to have surgery for better surgery outcome. This article is concluding pre-transplantation nutritional intervention and decreases in operative blood loss would help prevent post-transplantation infectious complications from developing during living donor LT. Branched-chain amino acid supplementation before LT affects the occurrence of infectious complications. Therefore, monitoring of BCM and lean mass can be good prognostic factor for preventing inflammation and complication of the surgery. InBody is able to provide BCM based on measurement of body water content.

Crawford, G. B., *et al* (2009). Estimating survival in patients with cancer receiving palliative care: Is analysis of body composition using bioimpedance helpful?. *Journal of palliative medicine*, 12(11), 1009-1014.

Elevated metabolic rate and accumulation of body fluid are indicators of a poor prognosis in patients with cancer receiving palliative care. Because BIA is simple for clinicians to use, is non invasive, and allows early detection of these parameters, it has the potential to improve prognostication. The fluid status of the patients were measured by using InBody.

Kiyama, T., *et al* (2005). **Postoperative changes in body composition after gastrectomy.** *Journal of gastrointestinal surgery*, 9(3), 313-319.

Nutritional status is one of the most important clinical determinants of outcome after gastrectomy. Laparoscopyassisted gastrectomy (LAG), distal gastrectomy (DG), or total gastrectomy (TG). The patients who underwent gastrectomy lost body protein mass during the early postoperative period. The type and extent of surgery has an effect on long-term body mass and composition. The study is mentioning that InBody may be used to assess body composition and may be useful for nutritional assessment in patients who have undergone gastrectomy