

Nutritional Approach in Malnourished Surgical Patients

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Objective:

To determine if perioperative administration of an immune-enhancing nutritional formula supplemented with arginine, n-3 fatty acids and nucleotides is associated with a decrease in post-operative morbidity in malnourished GI cancer surgery patients.

Methods:

196 malnourished patients scheduled for major surgery for cancer of the gastrointestinal tract were randomized to one of 3 groups (n = 150 after randomization). Malnutrition defined as a weight loss of $\geq 10\%$ of usual body weight in the past 6 months. Morbidity measured in terms of postoperative complications and hospital length of stay (LOS).

- 1) Preoperative group - Preoperative oral supplementation with 1L/day of Oral IMPACT[®] formula for 7 days; postoperative jejunal tube feeding within 12 hours after surgery of standard isocaloric/isonitrogenous tube feeding.
- 2) Perioperative group - Preoperative oral supplementation with 1L/day of Oral IMPACT* formula for 7 days; postoperative jejunal tube feeding within 12 hours after surgery of IMPACT tube feeding formula.
- 3) Control Group - Standard isocaloric/isonitrogenous jejunal tube feeding within 12 hours after surgery.

Results:

Intent-to-treat analysis revealed:

- Patients fed Oral IMPACT/IMPACT tube feeding formula perioperatively and Oral IMPACT formula preoperatively had a significantly shorter mean LOS (12.5 and 13.2 days, respectively) than the control group (15.3 days) $p=0.001$ and $p = 0.01$.
- Patients fed Oral IMPACT/IMPACT tube feeding formula perioperatively and Oral IMPACT formula preoperatively had decreased postoperative complications (18% and 28%, respectively) than the control group (42%) $p = 0.02$ (perioperative group vs. control).

Conclusions:

Investigators concluded the perioperative (before and after surgery) intake of an immune-enhancing nutritional formula (Oral IMPACT/IMPACT tube feeding formula) reduced LOS and decreased postoperative complications in malnourished GI surgical cancer patients.

Summary prepared by Nestlé HealthCare Nutrition. For a complete copy of the study, please go to the following site:

http://www.ncbi.nlm.nih.gov/pubmed/11822956?ordinalpos=18&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

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* IMPACT ADVANCED RECOVERY[®] Advanced Nutrition Drink is the oral form of IMPACT Formula offered in the United States.