

## Nutritional Approach in Malnourished Surgical Patients

*M Braga, L Gianotti, L Nespoli et al*

*Arch Surg 2002; 137: 174-180*

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

IMPACT® and IMPACT ADVANCED RECOVERY® are registered trademarks of Société des Produits Nestlé S.A., Vevey, Switzerland

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