

## **A Randomized Controlled Trial of Preoperative Oral Supplementation With a Specialized Diet in Patients With Gastrointestinal Cancer**

*Gianotti L, Braga, Nespoli L, Radaelli G, et al.  
Gastroenterology 2002;122:1763-1770.*

### **Objective**

This study is a prospective, randomized, controlled trial to determine the outcome of either pre-operative supplementation with an oral supplement containing added arginine, n3 fatty acids and nucleotides or peri-operative supplementation (both preop and post-op) of the same formula as compared with conventional treatment (no nutrition supplementation) in gastrointestinal cancer patients undergoing surgical treatment who have not experienced significant weight loss.

### **Methods**

Each arm had 101-102 patients:

- a:** preop supplement of 1L IMPACT<sup>®</sup> formula 5 days prior to surgery,
- b:** perioperative supplement of 1L IMPACT formula/d 5 days pre and post-op fed jejunally starting within 12 hrs, and
- c:** conventional treatment without nutrition supplementation.

In the peri-operative group (**b**), the same 1L/d treatment formula was administered preop, and during surgery an NJT was placed to initiate feeding within 12 hours post-procedure. Statistics were analyzed with intent-to-treat analysis. The perioperative treatment group (**b**) had slightly higher co-morbid factors, yet this was not significant.

### **Results:**

- Postoperative infectious complications were significantly less than conventional treatment in both groups (preop p=0.006, periop p=0.02).
- Both IMPACT formula groups measured a decreased length of stay (preop p=0.008, periop p=0.03).
- Formula was well tolerated in the peri-operative group with 88.1% getting to goal feeding rate.

### **Conclusion:**

Investigators concluded an oral supplement enriched with arginine, n3 and nucleotides significantly improved outcomes in gastrointestinal cancer patients who hadn't experienced significant weight loss and were undergoing surgery. It seems that the simple approach of a preoperative supplement for 5 days was as effective as the perioperative treatment.

**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/12055582?ordinalpos=6&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pubmed\\_DefaultReportPanel.Pubmed\\_RVDocSum](http://www.ncbi.nlm.nih.gov/pubmed/12055582?ordinalpos=6&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)