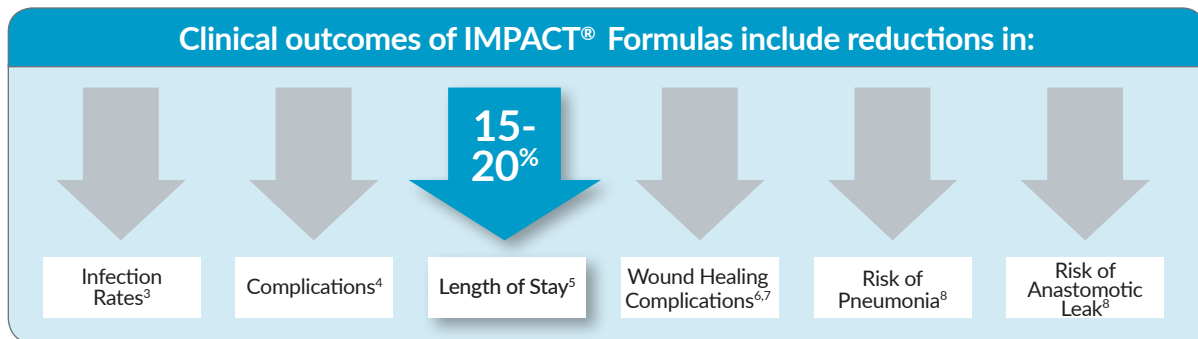


Reducing Length of Stay



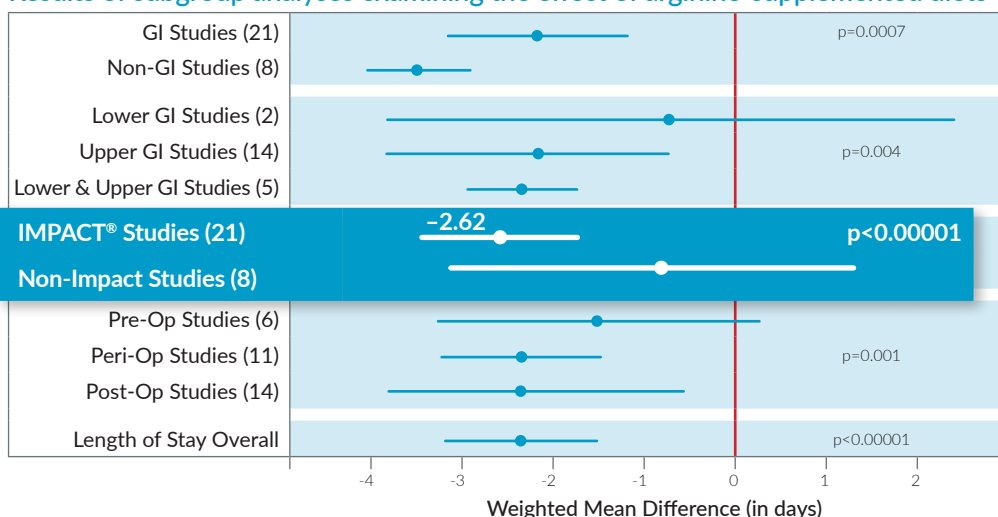
An analysis of 29 studies shows IMPACT® formula is proven to reduce post-op length of stay (LOS) vs. control in major elective surgery patients by 15-20%.⁵

Study Objective: To provide an up-to-date systematic and large review (n=3,487) of randomized clinical trials evaluating arginine-supplemented immunonutrition (IM) in major elective surgical patients.

Synopsis:

- Hospital LOS, aggregated across 29 surgical studies of IM vs. standard formula, showed a reduction of -2.38 WMD (95% CI, -3.39 to -1.36 ; $p < 0.00001$). Of the 29 studies, 21 were in GI, 6 in head and neck cancer, 1 in cardiac and 1 in gynecological cancer surgery.
- A priori subgroup analyses compared studies that used IM containing supplemental arginine, omega-3 fatty acids and nucleotides (IMPACT® formula) with studies that used other arginine-supplemented IM formulas (non-IMPACT®).
 - Studies using IMPACT® formula found a 15-20% reduction in LOS vs. control (-2.62 WMD; 95% CI, -3.65 to -1.59 ; $p < 0.00001$), whereas non-IMPACT® studies did not (-0.89 WMD; 95% CI, -3.21 to 1.44 ; $p = 0.45$). Average LOS was 16.7 days and 20.1 days for patients receiving IMPACT® formula and control, respectively.
 - Likewise, studies using IMPACT® formula found a 51% reduction in risk of infectious complications (RR=0.49; 95% CI, 0.41–0.58; $p < 0.00001$), whereas non-IMPACT® studies did not show significance (RR=0.95; 95% CI, 0.75–1.21; $p = 0.68$).
- Additionally a prior sub-analysis found perioperative administration of IM yielded the most significant benefit in reduction of both LOS and risk of infection.

Results of subgroup analyses examining the effect of arginine-supplemented diets on hospital length of stay



Number in parenthesis indicates number of studies. p Values: refer to the differences in the effect of arginine-supplemented diets on hospital length of stay between subgroups (gastrointestinal [GI] versus non-GI studies, $p = 0.0007$; lower GI, upper GI, and mixed GI studies, $p = 0.004$; IMPACT® versus non-IMPACT® studies, $p < 0.00001$; preoperative, perioperative, and postoperative, $p = 0.001$).

Adapted from Drover et al., J Am Coll Surg 2011, Figure 5

IMPROVING SURGICAL OUTCOMES WITH

IMPACT® Immunonutrition Formulas

Contains a unique blend of arginine, omega-3 fatty acids (EPA+DHA from fish oil), and nucleotides shown to reduce complications in major elective surgery patients³⁻¹¹

Consistent outcomes in over **80 publications** in major elective surgeries, including:
Upper GI, Lower GI, Cardiac, Head and Neck, Bladder Cancer, Gyn-Oncology, Hip



Nutrition Information

	IMPACT ADVANCED RECOVERY® Drink		IMPACT® Formula	IMPACT® Peptide 1.5 Formula
Serving Size	Per 178 mL carton	Per 534 mL (3 cartons)	Per 1000 mL	Per 1000 mL
Supplemental L-arginine (g)	4.2	12.6	12.5	18.7
EPA + DHA (g)	1.1	3.3	1.7	4.9
Nucleotides (g)	0.43	1.3	1.2	1.8
Calories (kcal)	200	600	1,000	1,500
Protein (g)	18 (35% of total kcal)	54 (35% of total kcal)	56 (22% of total kcal)	94 (25% of total kcal)

Ordering Information

PRODUCT	PRODUCT CODE	NDC FORMAT NUMBER	CASE UPC (GTIN)	PACKAGING
IMPACT® Unflavored	35810000	43900-0358-10	10043900358106	24-250 mL cartons/case
IMPACT® UltraPak® System	35810800	43900-0358-18	10043900358182	6-1000 mL bags/case
IMPACT ADVANCED RECOVERY® Vanilla	4390099291	43900-0992-90	00043900992914	15-178 mL cartons/case
IMPACT® Peptide 1.5 Unflavored	4390097400	43900-0973-99	10043900974009	24-250 mL cartons/case
IMPACT® Peptide 1.5 UltraPak® System	4390097371	43900-0973-70	10043900973712	6-1000 mL bags/case

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