Proven Surgical Nutrition

The IMPACT® Family of Immunonutrition Formulas have more data in more types of surgery with more positive outcomes than any other immunonutrition formula. When starting a perioperative nutrition protocol, use a proven formula.¹.² Use IMPACT® formulas.

	IMPACT Advanced	Ensure Surgery Immonition
	IMPACT Advanced Recovery® Immunonutrition Drink	ENSURE® Surgery Immunonutrition Shake
Evidence	Contains the most evidence-based blend of immunonutrients; studied in more than 40 RCTs and multiple Enhanced Recovery Protocols. ¹⁻⁷	No peer-reviewed studies of Ensure® Surgery were found in the literature.
Serving Size	8.45 fl oz (250 mL)	8 fl oz (237 mL)
Calories	280	330
Total Protein	26 g	18 g
Supplemental Immunonutrient Blend		
L-arginine	6.3 g	4.2 g
Omega-3 Fatty Acids (EPA+DHA)	1.65 g	1.1 g
Dietary Nucleotides	645 mg	O mg
	 Are the building blocks of DNA and RNA⁸ Become indispensable in stressed states^{8,9} Are essential for rapidly replicating cells (T-lymphocytes and enterocytes) to help support immune function.^{9,10} In a meta-analysis, use of arginine-supplemented formulas that lacked supplementation of dietary nucleotides, did NOT make a significant difference in clinical outcomes versus standard nutrition.² 	
Carbohydrate	20 g	45 g
	Carbohydrate controlled formula helps support blood glucose management. Hyperglycemia increases the risk of infection post-operatively for people with and without diabetes. 30% of postop hyperglycemic episodes were found in patients without diabetes. ¹¹	
Recommended Protocol	2 cartons per day for 5 days before and at least 5 days after surgery	2–3 cartons per day for 5–7 days before and after surgery
	The IMPACT Advanced Recovery® Drink protocol provides 7.1 fl oz (211 mL) less volume per day when 2 cartons are compared with 3 cartons of Ensure® Surgery Shake.	

^{1.} Adiamah A et al. Ann Surg 2019; 270: 247-256. 2. Drover JW et al. J Am Coll Surg. 2011 Mar; 212(3):385-99. 3. Goncalves TJM et al. JPEN 2020; on-line first.

This summary is provided for comparison purposes only; not all clinical considerations are included.

This document is not intended to be a substitute for clinical judgment. For specific product information, please consult the manufacturer.

For assistance in product selection, call Nestlé at 1-800-422-2752 or visit www.NestleMedicalHub.com



^{4.} Alito Aprelino M & de Aguilar-Nascimento JE. Nutr J 2016;15:1-7. 5. Hamilton-Reeves JM et al. Euro Urol 2016;69(3):389-392.

^{6.} Robinson LA et al. J Thorac Cardiovasc Surg 2020; on-line ahead of print. 7. Majumder A et al. J Am Coll Surg 2016;222:1106-1115.

^{8.} Hess JR and Greenberg NA. NCP 2012;27(2):281-294. **9.** Santora and Kozar et al. J Surg Res 2010;161:288-294.

^{10.} Gil A. Eur J Clin Nutr 2002;56(Suppl 3):S1. 11. Kwon S et al. Ann Surg 2013;257:8-14.