

The Nutrison range, formulated with P4 blends:

DESIGNED WITH TOLERANCE IN MIND

Gastrointestinal intolerance is common in enterally-fed patients and can arise at any point along their care journey¹⁻³

Up to 61% of enterally-fed patients experience gastrointestinal intolerance frequently linked to their underlying illnesses.⁴

Symptoms of upper gastrointestinal intolerance are common and include:^{3,5,6}



These side effects can contribute to poorer clinical outcomes for patients:



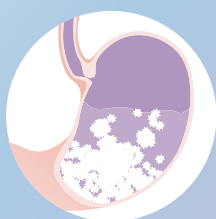
Reduced nutritional intake⁵
Diminished quality of life⁷



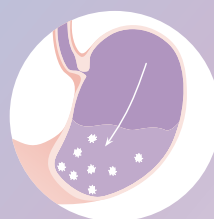
Higher risk of pneumonia⁶
Longer hospital stays⁴

Gastrointestinal tolerance and coagulation of the proteins:

Often intolerance is linked to increased gastric residual volumes, which can be exacerbated by coagulating proteins such as casein. Changes in solubility in the low pH environment of the stomach cause casein to coagulate, which can slow gastric emptying and contribute to the symptoms of intolerance.



Coagulating proteins like casein



Non-coagulating proteins like soy,
whey and pea

The Nutrison range of products with P4 protein blends has been designed with tolerance in mind

Our unique P4 blends of high protein quality, formulated with 4 protein sources, soy, pea, whey and casein, are designed to be non-coagulating in the stomach.⁸⁻¹¹ This supports faster gastric emptying and reduced gastric retention.^{8-10,12}

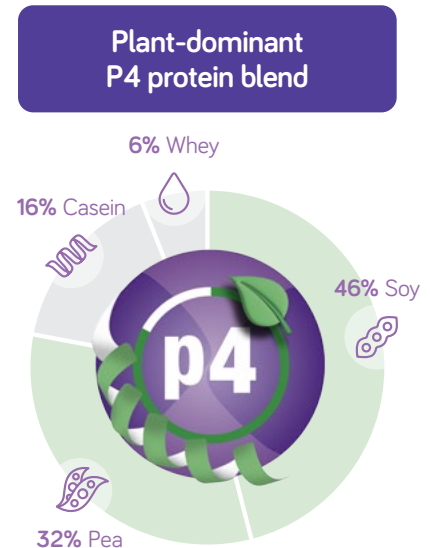
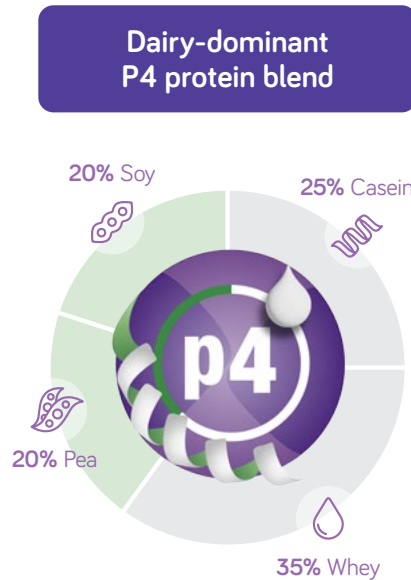


Illustration of casein-dominant blend vs. Nutrison protein blends*



Casein-dominant protein blend



Dairy-dominant P4 protein blend, Nutrison Protein Plus



Plant-dominant P4 protein blend, Nutrison Energy

The tolerability of Nutrison tube feeds with both P4 protein blends have been proven in several studies^{9,10}



Not all Nutrison products are formulated with P4, reach out to your Nutricia representative for more information on which Nutrison products contain P4.

Nutrison formulas with P4 protein blends are

- Well-tolerated^{9,13}
- Designed to be non-coagulating to support faster gastric emptying and reduce the risk of gastric retention and aspiration^{8-12,14}
- Demonstrate excellent digestability and bioavailability^{8,12,15-20}



THIS CONTENT IS FOR HEALTHCARE PROFESSIONALS ONLY.

Nutrison is a food for special medical purposes. Must be used under medical supervision.

References 1. Blaser, et al. Nutr Clin Pract 2021;36(1):40-9. 2. Wang, et al. BMC Gastroenterology 2025;25:233. 3. Ayhanci, et al. Clin Sci Nutr 2025;7(1):1-12. 4. Gungabissoon, et al. JPEN 2015;39(4):441-8. 5. Montejo, et al. Crit Care Med 1999;27(8):1447-53. 6. Mizock, et al. Curr Gastroenterol Rep 2007;9(4):338-44. 7. Ojo, et al. Nutrients 2019;11(5):1046. 8. Kuyumcu, et al. JPEN 2015;39(5):544-51. 9. van Eck, et al. Food Research International 2024;197:115162. 10. van den Berg, et al. Clin Nutr ESPEN:63:1310. 11. van den Braak, et al. Clin Nutr 2013;32(5):765-71. 12. Goelen, et al. Clin Nutr. 2021;40(5):2663-72. 13. Luttikhoud, et al. Am J Clin Nutr 2016;103(2):435-43. 14. Klebach, et al. JPEN 2016;40:134-5. 15. Liu, et al. Nutrients 2019;11:2613. 16. Veldhorst, et al. ESPEN 2024: ESOEN24-ABS-1738. 17. Report of an FAO Expert Consultation 2013. 18. Rutherford SM, et al. J Nutr 2015;145(2):372-9. 19. Yang H, et al. Agro Food Industry Hi Tech 2021;23(6):8-10. 20. Huang S, et al. Crit Rev Food Sci Nutr 2018;58(15):2673-8.

*Lemon juice is added to the formula to replicate the lower pH environment of the stomach.