













# PRODUCT RESOURCE BY COVID-19 STAGE

Disease Stage & Nutritional Considerations	Products to Consider Using	Additional Notes
<p><b>ONSET OF SYMPTOMS</b> Hydration and high calorie, high protein intake should be a main focus when onset of COVID-19 is noted<sup>1</sup>. Reports suggest that many patients struggle with GI distress upon confirmed diagnosis and even before other symptoms arise<sup>2</sup>.</p> <p><b>HOSPITAL ADMISSION</b> The clinical situation may not greatly differ from hospital to home. While symptoms will be similar they will likely be more intense. Hydration and high protein, high calorie intake should be the main nutritional focus<sup>3</sup>. If GI issues are present, intervention may be necessary.</p>	 <p><b>ProSource Liquid</b> 10g Protein, 100kcal, 30ml liquid, single use sterile sachet, semi-elemental, 4 flavours variants.</p>  <p><b>ProSource Plus</b> 15g Protein, 100kcal, 30ml liquid, single use sterile sachet, semi-elemental, 3 flavours variants.</p>  <p><b>HyFIBER</b> 12g Soluble fibre, FOS, 30ml liquid, single use sterile sachet.</p>	<p><b>Using ProSource products &amp; HyFIBER orally</b> ProSource Liquid and ProSource Plus have been designed primarily for oral use. Their protein quality, taste and variety of flavours ensure effective compliance. Neutral variants support food first if required. HyFIBER is designed to be used both orally or via an enteral feeding tube without any risk of tube blockage.</p> <p><b>Product Information</b> Detailed product information about all our products are available on our website <a href="http://www.nutrinovo.com">www.nutrinovo.com</a></p>
<p><b>INTUBATION</b> ESPEN/ASPEN/SCCM recommendations for COVID-19 nutrition intervention in the ICU all recommend high protein provision<sup>3,4</sup>. Recommendations vary between 1.2-2.0 gm/kg body weight and 15-20 kcal/kg body weight<sup>3</sup>. Because these patients are likely being tube fed, they may also be experiencing loose stools/diarrhoea which could be exacerbated by the COVID-19 virus.</p>	 <p><b>ProSource TF</b> 11g Protein, PDCAAS score of 100, 44kcal, no carbs, 45ml water-thin liquid, semi-elemental, single use sterile sachet.</p>  <p><b>ProSource TF Plant</b> 15g Protein, plant based, 90kcal, 45ml water-thin liquid, semi-elemental, single use sterile sachet.</p>  <p><b>HyFIBER</b> 12g Soluble fibre, FOS, 30ml liquid, single use sterile sachet.</p>	<p><b>Administration in Enteral Feeding</b> Further information surrounding the use of ProSource TF, TF Plant and HyFIBER can be found on the Covid-19 page at <a href="http://www.nutrinovo.com">www.nutrinovo.com</a>. All products are water-thin and are designed to be used as part of an enteral feeding regime.</p>

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<p><b>EXTUBATION</b> Post extubation dysphagia may be a challenge depending upon patient symptoms and duration of intubation<sup>5</sup>. During the post ICU/extubation period, it is suspected that protein provision should still play an important role in the nutritional care plan.</p> <p><b>RECOVERY</b> It is recommended to maintain high calorie and high protein intake for 6 months or more<sup>6</sup>. The goal will likely be continuing to target a protein intake of 1.2-2.0 gm/kg/day, while also maximising calorie load<sup>6,7</sup>. If there was a lengthy duration of intubation, dysphagia maybe of concern.</p>	 <p><b>ProSource Liquid</b> 10g Protein, 100kcal, 30ml liquid, single use sterile sachet, semi-elemental, 4 flavours variants.</p>  <p><b>ProSource Plus</b> 15g Protein, 100kcal, 30ml liquid, single use sterile sachet, semi-elemental, 3 flavours variants.</p>  <p><b>ProSource Jelly</b> 20g Protein, 90kcal, 118ml jelly, single use sterile cup, semi-elemental, 4 flavour variants, IDDSI level 4.</p>  <p><b>HyFIBER</b> 12g Soluble fibre, FOS, 30ml liquid, single use sterile sachet.</p>	<p><b>Dysphagia</b> Nutrinovo products have been independently assessed by an expert to review their IDDSI level. A chart showing each product and it's IDDSI level can be found on the COVID-19 page at <a href="http://www.nutrinovo.com">www.nutrinovo.com</a></p>

**References:**

1. For Patients Recovering at Home: Nutrition and Hydration: Key Weapons in the Fight Against COVID 19. (2020). Retrieved May 4, 2020, from [https://www.nutritioncare.org/uploaded-Files/Documents/Guidelines\\_and\\_Clinical\\_Resources/COVID19/COVID19 Patient Nutrition Paper.pdf](https://www.nutritioncare.org/uploaded-Files/Documents/Guidelines_and_Clinical_Resources/COVID19/COVID19 Patient Nutrition Paper.pdf)
2. Management of Patients with Confirmed 2019-nCoV. (2020, April 6). Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>
3. Martindale, R., & Patel, J. et al. Nutrition Therapy COVID-19 SCCM-ASPEN. Retrieved from [https://www.nutritioncare.org/uploadedFiles/Documents/Guide- lines\\_and\\_Clinical\\_Resources/Nutrition Therapy COVID-19\\_SCCM-ASPEN.pdf](https://www.nutritioncare.org/uploadedFiles/Documents/Guide- lines_and_Clinical_Resources/Nutrition Therapy COVID-19_SCCM-ASPEN.pdf)
4. McClave, S. A., Taylor, B. E., Martindale, R. G., Warren, M. M., Johnson, D. R., Braunschweig, C., ... Compher, C. (2016). Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient. *Journal of Parenteral and Enteral Nutrition*,40(2), 159-211. doi:10.1177/0148607115621863
5. Rassameehiran, S., Klomjit, S., Mankongpaisarnrung, C., & Rakvit, A. (2015). Postextubation Dysphagia. *Proceedings (Baylor University. Medical Center)*, 28(1), 18–20. [https:// doi.org/10.1080/08998280.2015.11929174](https://doi.org/10.1080/08998280.2015.11929174)
6. van Zanten, A.R.H., De Waele, E. & Wischmeyer, P.E. Nutrition therapy and critical illness: practical guidance for the ICU, post-ICU, and long-term convalescence phases. *Crit Care* 23, 368 (2019). <https://doi.org/10.1186/s13054-019-2657-5>
7. Wischmeyer, P. (2017). Optimising nutrition for recovery after icu. *ICU Management and Practice*, 17(3), 156–158. Retrieved from [https://healthmanagement.org/uploads/article\\_at- tachment/icu-v17-i3-wischmeyer-optimisingnutrition.pdf](https://healthmanagement.org/uploads/article_at- tachment/icu-v17-i3-wischmeyer-optimisingnutrition.pdf)