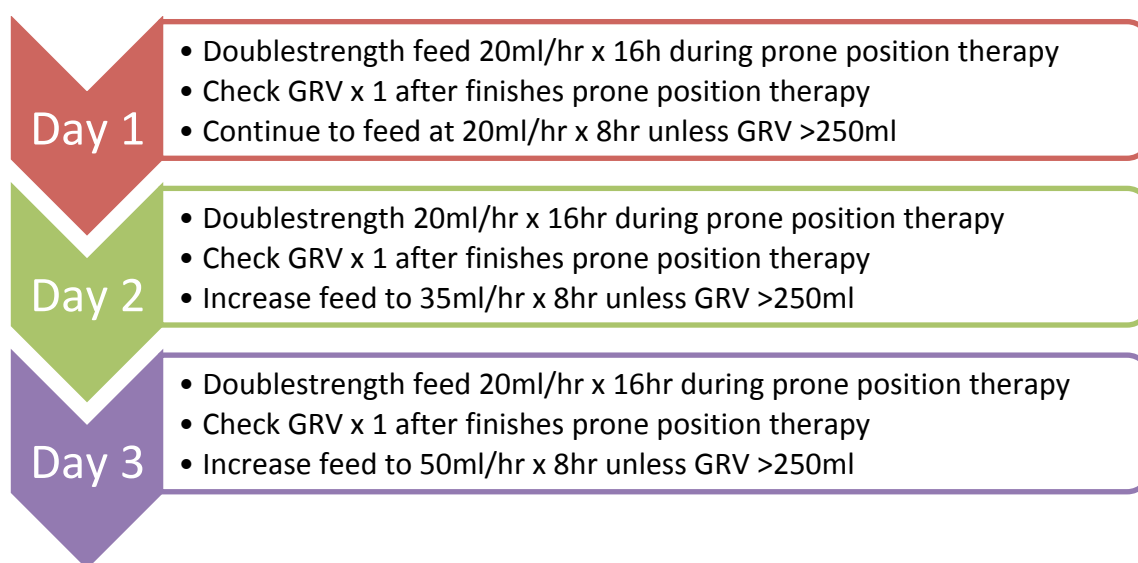


Guide to commencing enteral nutrition in adult patients in intensive care with suspected or confirmed COVID-19 (sample template)

- Early enteral feeding: start within 24-48h once haemodynamically stable¹⁻³.
- For medical patients with single organ failure – recommend avoid checking gastric residual volumes (GRVs) unnecessarily² to lessen the risk of aerosol/droplet spread.
- Continue to check GRVs for surgical patients, multi-organ failure (MOF) patients, patients who have vomited in last 24h and intestinal failure patients.
- For patients undergoing **prone position therapy*** – start early enteral nutrition.^{3,4} See Figure 1 below for out-of-hours guideline for patients not at high risk of refeeding syndrome and Figure 2 overleaf for refeeding risk patients.
- Consider prokinetic use on a case-by-case basis if intolerance is demonstrated or expected.
- Consider a double-strength feed to limit fluid provision.
- Consider a higher protein feed with lower energy content, if on high dose propofol.

Figure 1: Out-of-hours nasogastric tube feeding when using prone position therapy for 16h per 24h – for patients **NOT** at refeeding syndrome risk



Note:

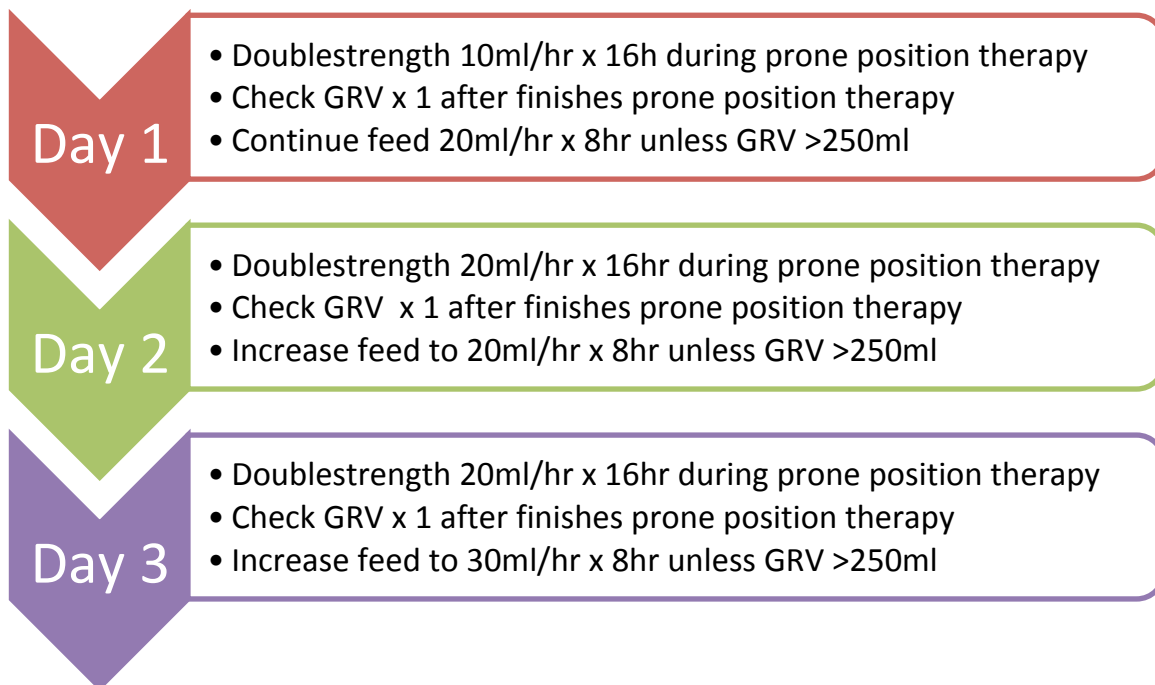
- I. Insert name of double-strength feed; use local GRV cut-off limit.
- II. Day 1 gives 960kcal; Day 2 gives 1200kcal; Day 3 gives 1440kcal.
- III. Concurrent Propofol* infusion will give extra kcal and fat. Monitor triglyceride level. Consider a high protein lower energy feed if on high dose propofol, e.g. >15ml/hr.

***Prone ventilation** is ventilation that is delivered with the patient lying in the prone position. Prone ventilation may be used for the treatment of acute respiratory distress syndrome (ARDS) mostly as a strategy to improve oxygenation when more traditional modes of ventilation fail (e.g. lung protective ventilation).

****Propofol** is a lipid-soluble, short-acting IV sedative administered continuously to provide sedation in mechanically ventilated ICU patients. It is available in a lipid emulsion that provides energy as lipid, and needs to be considered when prescribing EN.

- IV. Consider giving protein supplement as bolus through feeding tube from day 3 during period when NOT in prone position.

Figure 2: Out-of-hours enteral feeding when using prone position therapy for 16h per 24h – for patients **AT HIGH RISK** of refeeding syndrome



Note:

- I. Day 1 gives 640kcal; Day 2 gives 960kcal; Day 3 gives 1120kcal.
- II. Give intravenous Pabrinex I and II od x 3d, and NG multivitamin od x 7-10d, or per local Refeeding Syndrome Guideline.
- III. These patients have a higher risk of cardiomyopathy – avoid hypophosphatemia.

Once assessed by the dietitian: follow the individualised patient specific care plan, or as per ICU Team.

References:

1. Canadian clinical practice guidelines for nutrition support in adult critically ill patients – 2015 updated recommendations. Available from: www.criticalcarenutrition.com
2. McClave SA, Taylor BE, Martindale RG, et al. (2016) Guidelines for the provision and assessment of nutrition support therapy in the adult critically ill patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) *Journal of Parenteral and Enteral Nutrition*, 40 (2), 159-211.
3. Singer P, Blaser AR, Berger MA, Alhazzani W, Calder PC, Casaer MP, Hiesmayr M, Mayer K, Montejo JC, Pichard C, Preiser JC, Van Zanten ARH, Oczkowski S, Szczeklik W, Bischoff SC. (2019) ESPEN guideline on clinical nutrition in the intensive care unit. *Clinical Nutrition*, 38, 48-79.

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4. Reintam Blaser A, Starkopf J, Alhazzani W, Berger MM, Casaer MP, Deane AM, et al. (2017) Early enteral nutrition in critically ill patients: ESCIM clinical practice guidelines. *Intensive Care Med* 43:380-98.

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