Enteral equipment manual for local health districts caring for infants and children

Adapting VygonTM Nutrisafe2[®] products for use with other ENFitTM compatible equipment

July 2022





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SHPN (ACI) 220572, ISBN 978-1-76023-264-1

Produced by: Paediatric Network

Preferred citation: NSW Agency for Clinical Innovation. Enteral equipment manual for local health districts caring for infants and children. Sydney: ACI; 2022.

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Version: 1 Trim: ACI/D21/2609

Published Jul 2022. Next review 2026.

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Purpose of this manual

The purpose of this manual is to provide neonatal intensive care units (NICUs), special care nurseries (SCNs), paediatric wards and emergency departments (EDs) with guidance on how to manage an enteral tube that is not compatible with equipment at the receiving site.

Background

The Agency for Clinical Innovation (ACI) Paediatric Clinical Nurse Consultant Expert Advisory Group raised an issue regarding variation and compatibility of enteral equipment for children and infants transferring between sites.

The concerns raised included variation and compatibility issues in the use of enteral equipment for those patients transferring between sites. Issues have been encountered when transferring from a NICU or SCN to a paediatric ward, as well as between the ED and the paediatric ward.

The Enteral Equipment Working Group (EEWG) was formed to seek expert advice and gain consensus on the best evidence to support this work and actions. The group consisted of experts in the field of paediatric equipment, state wide procurement, clinical experts and leads in their field that included nursing and dietetics.

EEWG was a collaboration between:

- ACI
- Clinical Excellence Commission
- HealthShare
- 25 representatives from local health districts (LHDs) and specialty health networks (SHNs).

The consensus from this group was to develop a manual directing clinicians to products which can safely adapt enteral feeding tubes, when an infant or child is transferred from one site to another, and incompatible equipment was in situ.

Tertiary, metropolitan and rural sites were consulted on the development of this manual.

Several incidents have been reported worldwide where enteral fluids or substances were incorrectly administered, including via the airway or intravenously. In response, two series of International Standards have been developed to provide application specific connectors:

ISO 20695:2020(en) - Enteral feeding systems — Design and testing

- ISO 80369-3 specifies connectors intended for use between an enteral giving set, enteral extension sets, enteral syringes, enteral catheters, and enteral accessories
- ISO 18250-3 specifies connectors intended for use between an enteral giving set, an enteral accessory and an enteral reservoir

Emergency departments

If a child presents to the ED requiring naso/oro-gastric feeding and/or rehydration or gastric aspiration, an ENFitTM compatible feeding tube appropriate to the child's age should be inserted.

Salem sump tubes are not suitable for feeding.

Inserting an incorrect tube at presentation will create problems with compatibility and potentially subject the child and staff to unnecessary procedures and risks.

Understanding connection types

There are currently two connection types in use in NSW which meet the ISO requirements. Both are identified for enteral use only, using the universal colour for enteral feeding, which is purple.

These are:

- ENFitTM
- NutriSafe2®

ENFitTM

ENFit[™] syringes, tubes, connectors, and other products are made by several companies. The companies included on NSW state contract include (but are not limited to):

- Medicina
- NeoMed
- Covidien (through Medtronic)

ENFit[™] devices are used in paediatric and adult wards throughout hospitals in NSW.

Nutrisafe2®

Nutrisafe2[®] products are exclusively made by Vygon™ and are used only in NICUs and SCNs in NSW.

Transferring patients to another facility that uses a different connection type

When transferring an infant or child to another facility, particularly if transferring from a SCN or NICU to a paediatric ward, it is recommended that a small supply of equipment (approximately 48 hours-worth, if able) is sent with the patient.

This would include:

- 30 or 50mL syringes to administer a feed via gravity
- appropriately sized syringes to administer medications (3ml, 5ml enteral syringes) that may be due on or shortly after admission (48-72 hours depending on location) to the new facility.

By providing a small supply of equipment, this will allow the receiving facility ample time to settle the patient, source appropriate equipment for the needs of the patient and avoid delays in the delivery of feeds and/or medications.

Adapting tubes

Incompatible tubes and/or equipment

If a patient has arrived with a gastric tube in situ that is incompatible with local equipment:

Option 1: a small supply of equipment was sent with the patient. Use this equipment and source locally stocked adaptors or place an order for adaptors.

Option 2: no equipment was sent with the patient. If no compatible equipment was supplied with the patient and there is no local stock of adaptors, re-site the gastric tube following local procedures. Confirm the patient clinical need has not changed and immediately place an order for adaptors to ensure stock is readily available when needed. Report any preventable procedures in **ims+**.

Adapting a Nutrisafe2[®] tube to ENFit[™] connections, pump, giving sets and syringes

Vygon[™] have a Nutrisafe2[®] tube to ENFit[™] adaptor available to order. Product available through:

Company: Device Technologies

Code VY 0368.75

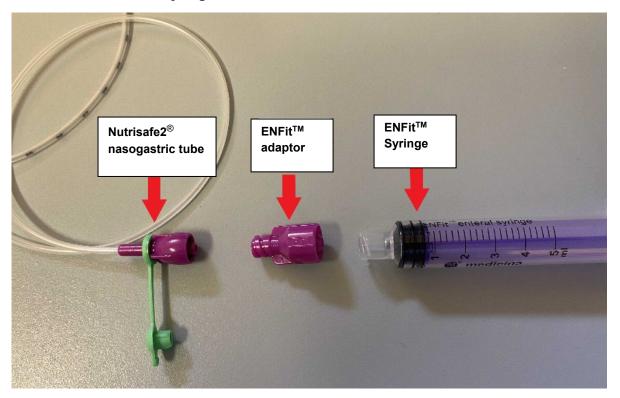
Figure 1: Nutrisafe2[®]/ENFit[™] adaptor – Enteral nutrition: Nutrisafe2[®] product catalogue

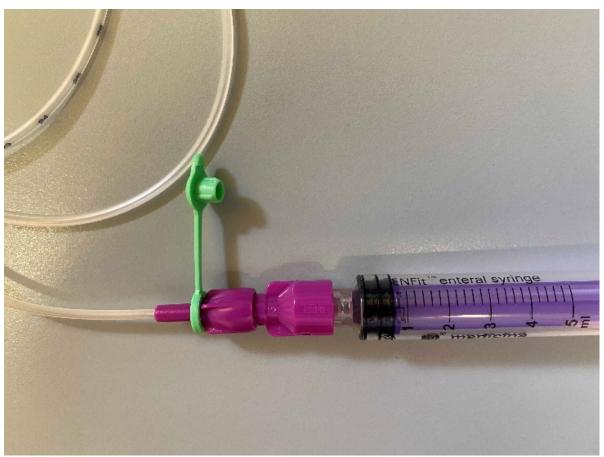
Nutrisafe2/ENFit adaptor - 0368.72

The Nutrisafe2/ENFit adaptor enables the connection between an administration set equipped with a female ENFit connector and a Nutrisafe2 feeding tube.



Figures 2 and 3: Nutrisafe2[®] feeding tube connected to Nurtisafe2[®] ENFit[™] adaptor connected to ENFit[™] syringe



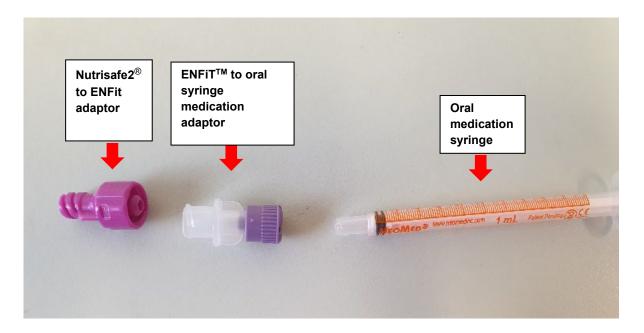


Alternative option: Adapting a Nutrisafe2[®] tube to ENFit[™] connections for oral syringe medication administration

Note: this option is not widely used and requires an additional adapter, however, is an alternative option should it be required.

To give an enteral medication using an oral medication syringe via a Nutrisafe2® feeding tube, connect using the ENFitTM to oral syringe medication adaptor. Flush with water for injection of at least 0.3mL to clear the adaptors, and a further 1.8mL of water for injection to clear the drug from the feeding tube.

Figures 4 and 5: Administration of medication via a Nurtisafe2[®] feeding tube





There are two suppliers for ENFit™ to oral syringe adaptors. Ordering details as below:

Item description	Supplier item code	Supplier	UOP
Adapter, enteral, transitional, ENFit™ to oral dispenser	777222	DHL Supply Chain (Australia) Pty Ltd	Box OF 30
Adapter, enteral, transitional, ENFit [™] to oral dispenser	BX-42907EN	Paragon Care Group Australia Pty Ltd	Box OF 30