



**FRESENIUS  
KABI**

caring for life

# Freka<sup>®</sup> Endolumina

single lumen transnasal intestinal tube

Product Code: 7981832



## Product features and insertion technique for healthcare professionals

Application via endoscope, oral re-routed to nasal insertion.

# Product features

## Design and suitability

The Freka Endolumina is a single lumen ENFit transnasal polyurethane tube suitable for intestinal feeding. Placement is through the working channel of a standard endoscope allowing for quick insertion.

Suitable for intestinal feeding of critically ill patients suffering from gastric stasis, gastric emptying disorders and pyloric stenosis.

## Part of the Freka family of products

The Freka family of products are well established worldwide and respected for their innovative design, product quality and portfolio options.

**If gastric aspiration or decompression is required then consider:**

**Freka Trelumina:** Triple lumen enteral feeding tube with gastric aspiration and decompression.

**Freka EasyIn:** Double lumen enteral feeding tube with gastric aspiration.

## One tube one lumen for jejunal feeding

### Feeding lumen

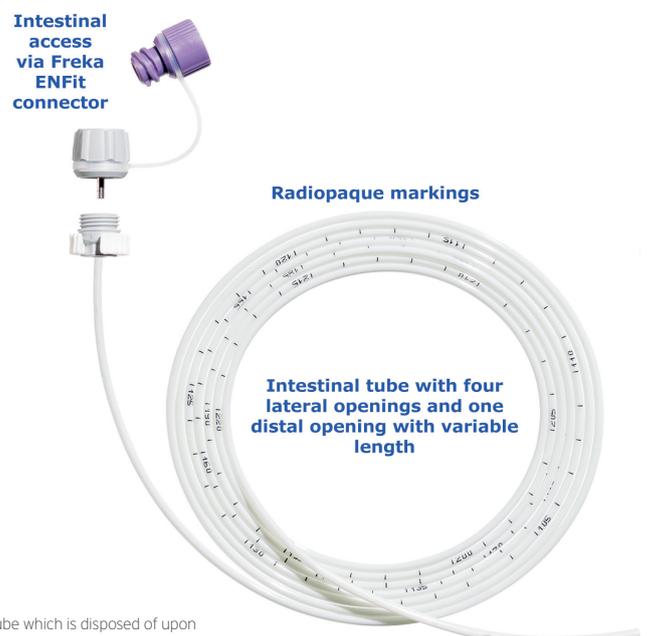
1.8 mm, 8 FR, 270 cm lumen with ENFit connector. Four lateral openings and one rounded terminal opening on feeding tube. 2.6 mm OD.

### Radiopaque markings

Radiopaque strip (barium sulphate) along tube length. Numbered every 5 cm with markings every 1 cm from 100 cm to 220 cm of length.

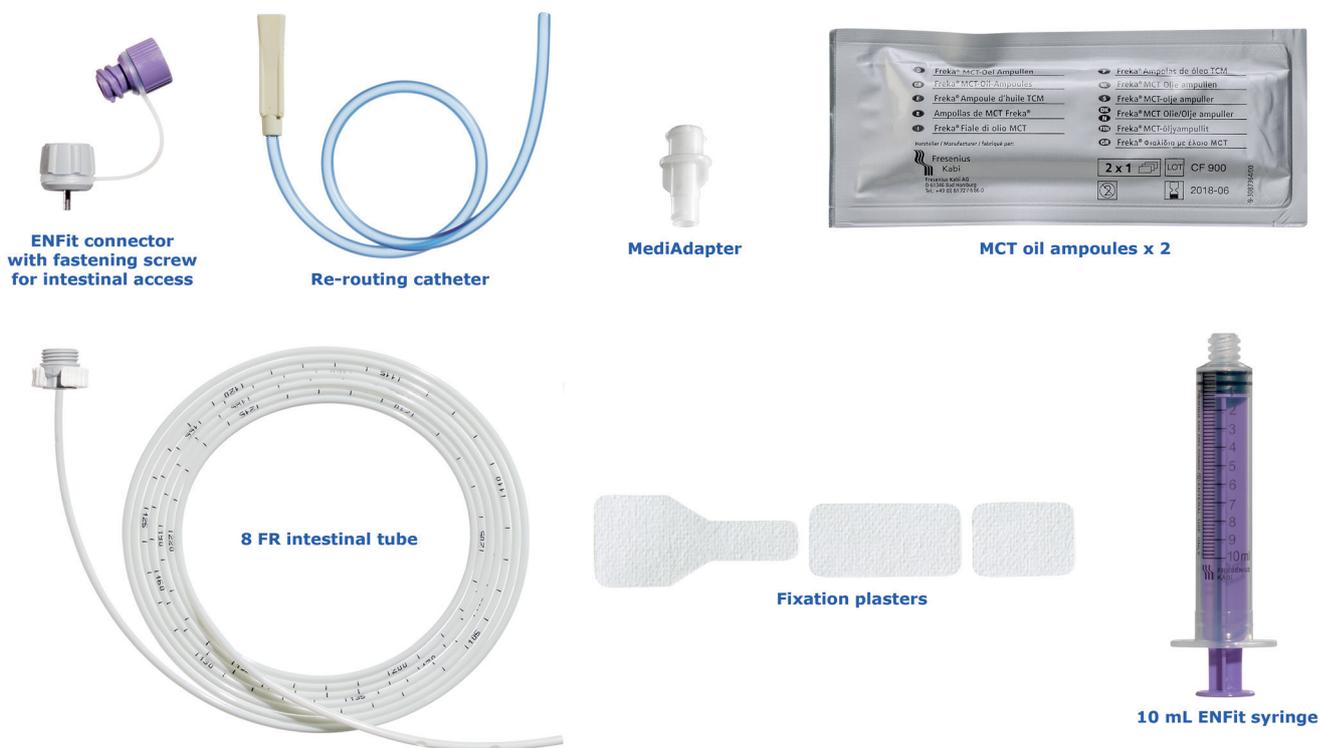
## Latex free, Luer free, PVC\* free and DEHP\* free

<b>Feeding tube</b> ENFit	<b>Length:</b>	270 cm
	<b>FR:</b>	8
	<b>ID:</b>	1.8 mm
	<b>OD:</b>	2.6 mm



\* Please note that whilst our Freka Endolumina is DEHP/PVC free, it contains a re-routing catheter/tube which is disposed of upon tube placement. This re-routing tube is made from PVC containing trace amounts of DEHP but is NOT left in situ within the patient.

## Included in the kit



### Freka Endolumina 8 FR single lumen transnasal enteral feeding tube

270 cm, 8 FR intestinal tube.

### MCT oil

Two ampoules of MCT oil for lubrication of the tube and guidewire.

### Plaster set

For nasal fixation of the Freka Endolumina enteral feeding tube.

### MediAdapter

Used to administer the MCT oil into the Freka Endolumina enteral feeding tube.

### Freka ENFit connector

Allows ENFit connection to the intestinal tube. Integral cap.

### ENFit syringe

10 mL Freka Connect syringe.

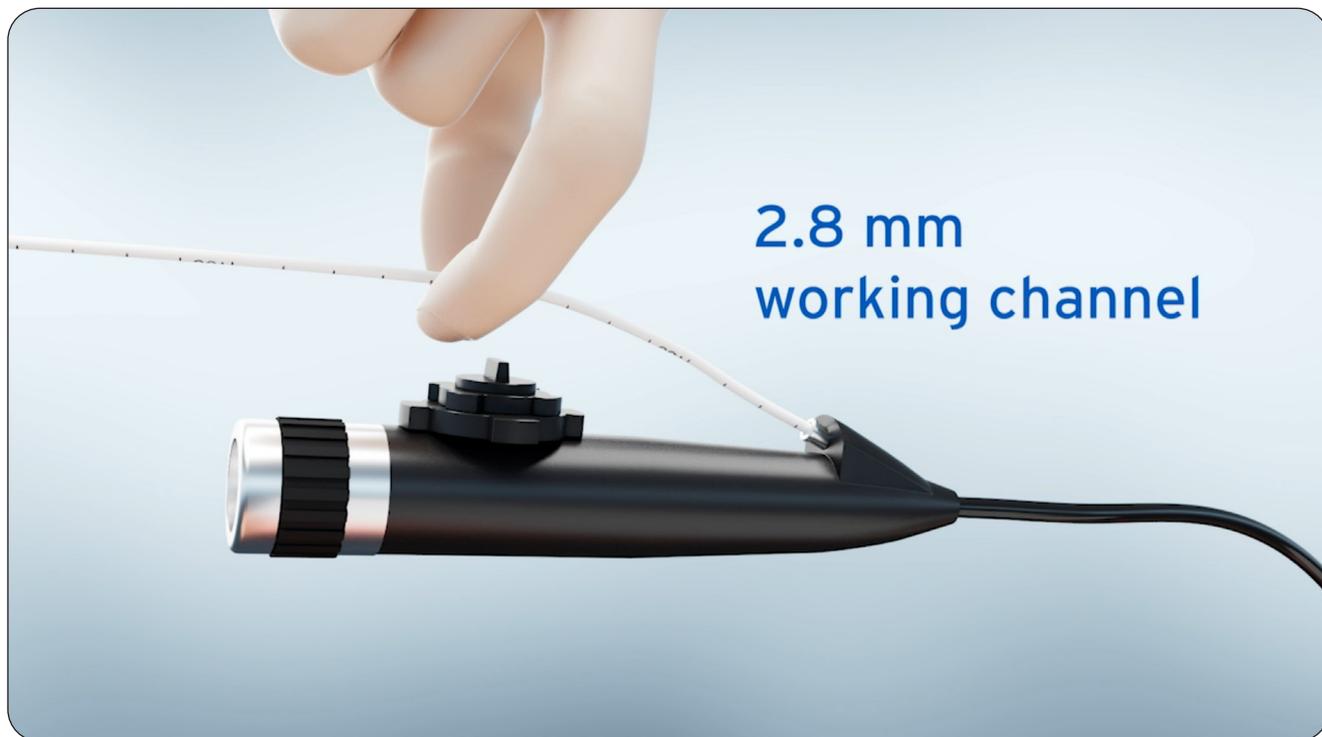
### Re-routing catheter

35 cm, 15 FR catheter used for re-routing during insertion from oral to nasal.

## Insertion technique

**N.B.** The following images may not reflect recommended patient positioning. Please defer to operator instructions.

### Application via endoscope, oral re-routed to nasal insertion

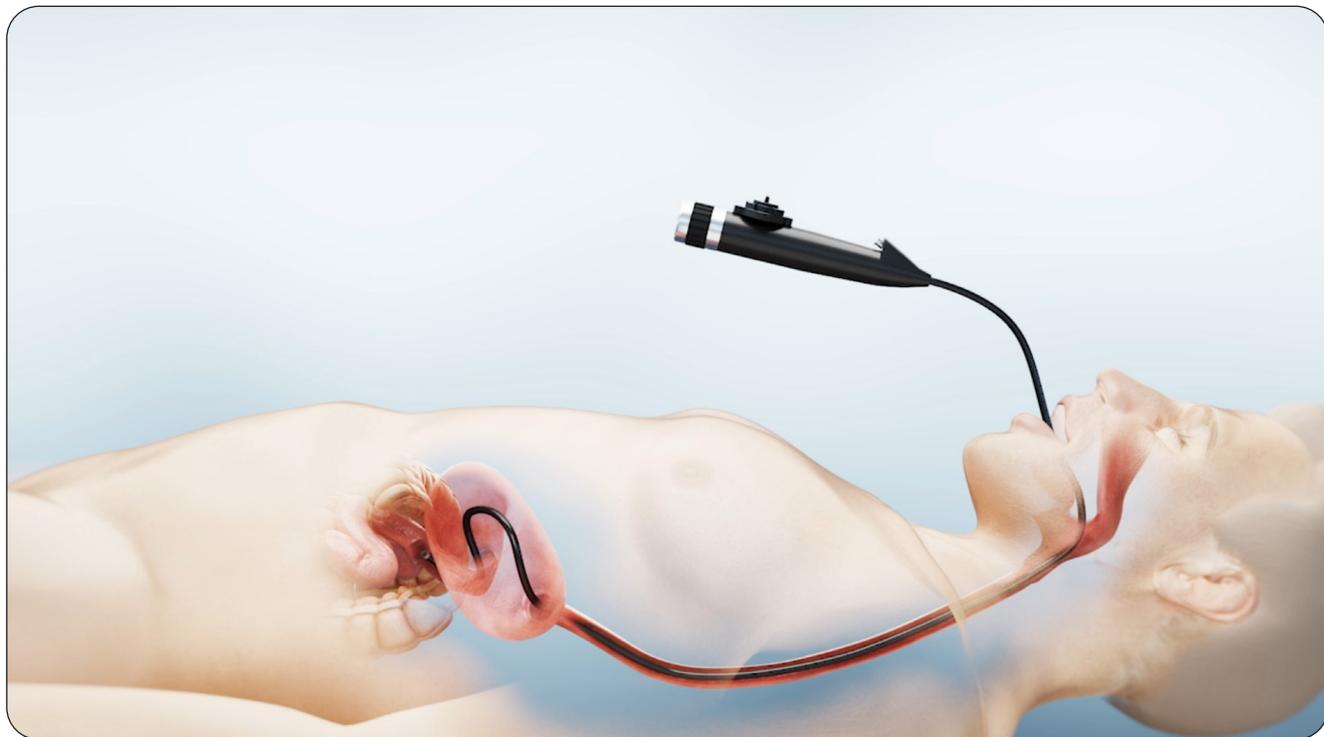


The Freka Endolumina is placed into position through the 2.8 mm working channel of a standard endoscope.

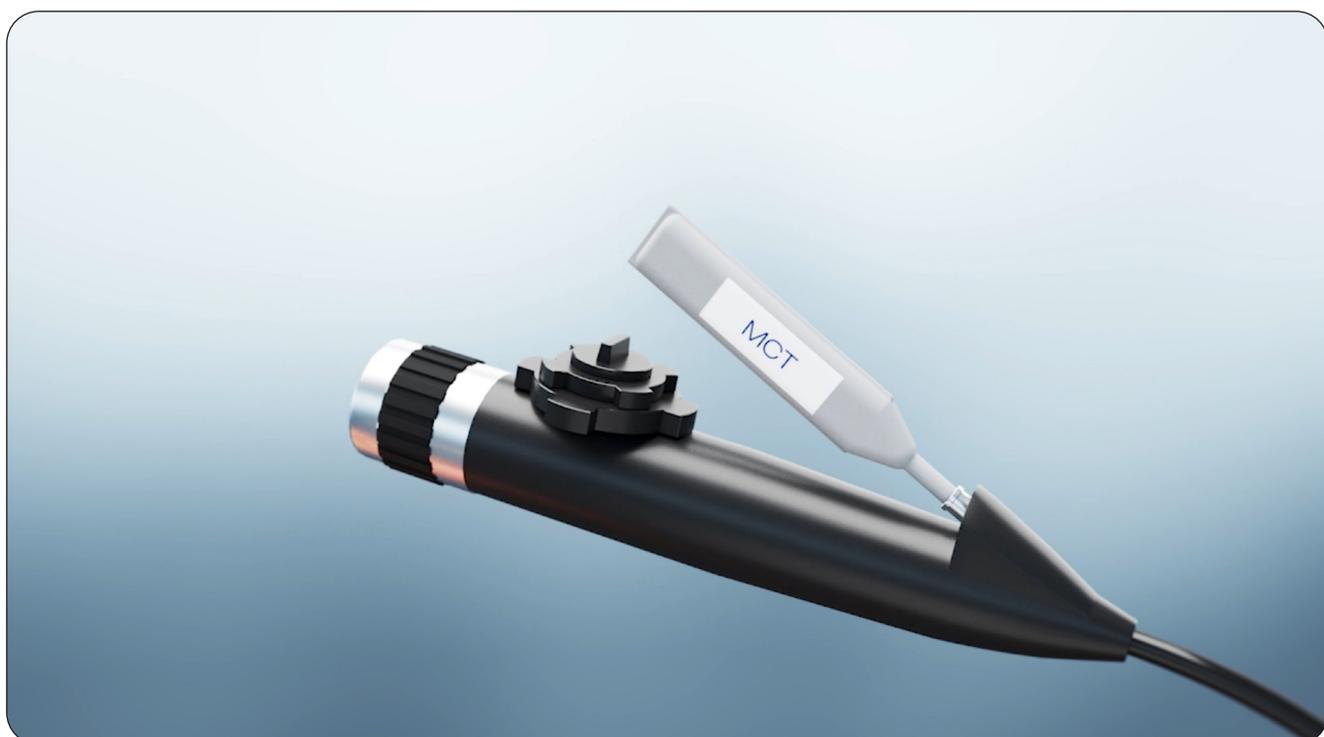


Insert the endoscope into the stomach and insufflate with air.

## Application via endoscope, oral re-routed to nasal insertion

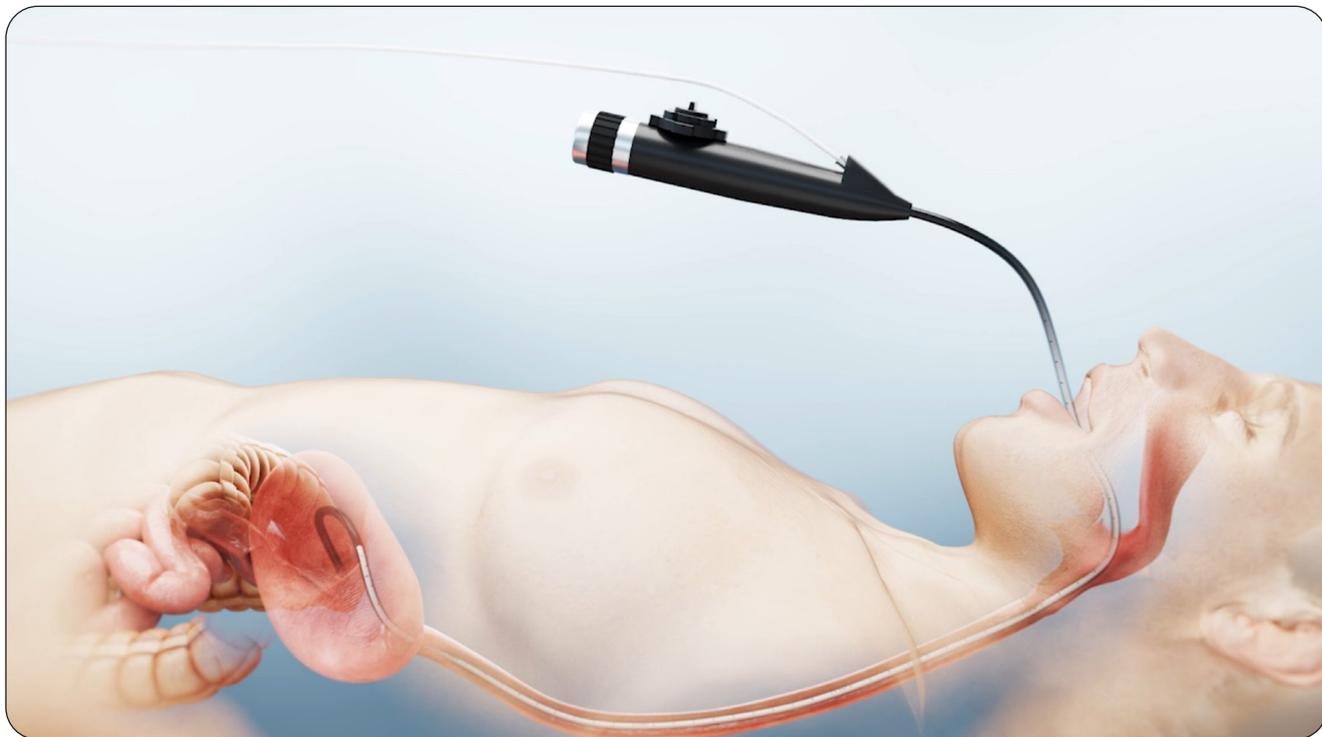


Advance the endoscope through the pylorus as far as the ligament of Treitz which indicates the transition of the duodenum to the jejunum.

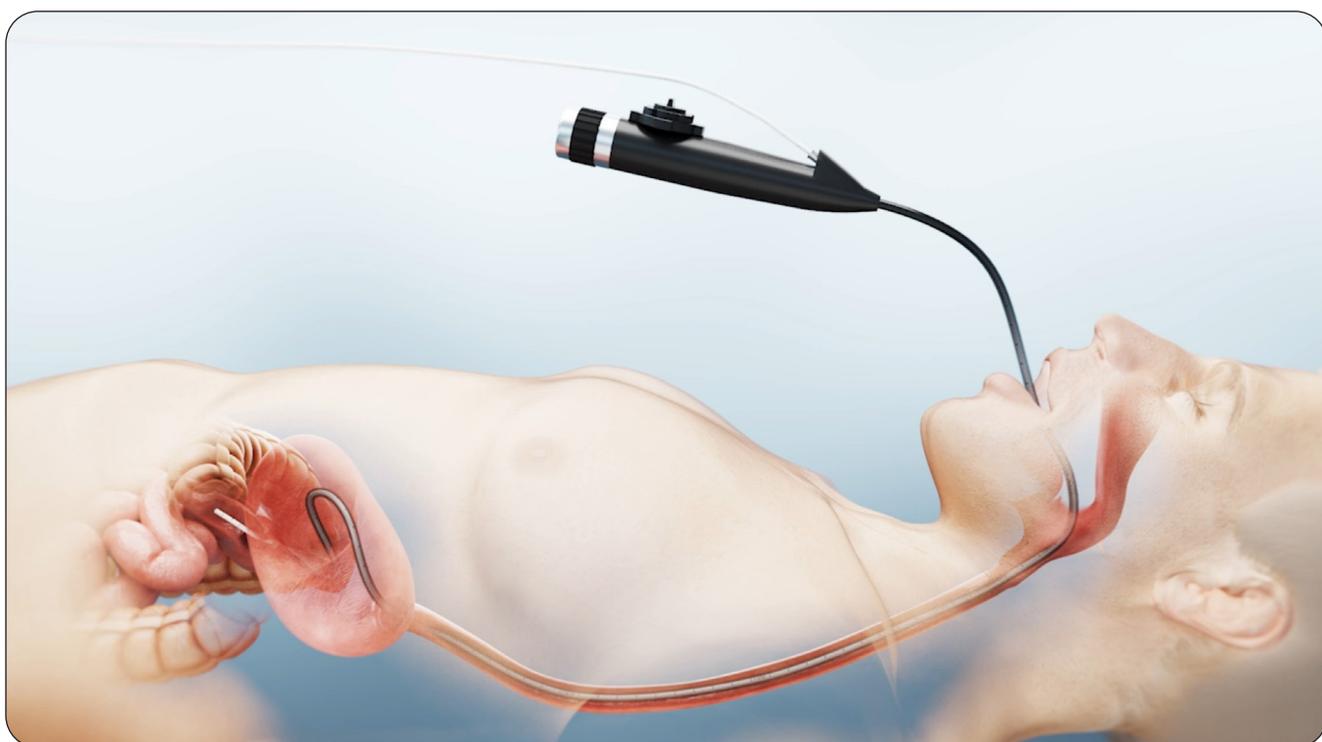


Lubricate the working channel and the feeding tube well using one ampoule of MCT oil.

## Application via endoscope, oral re-routed to nasal insertion

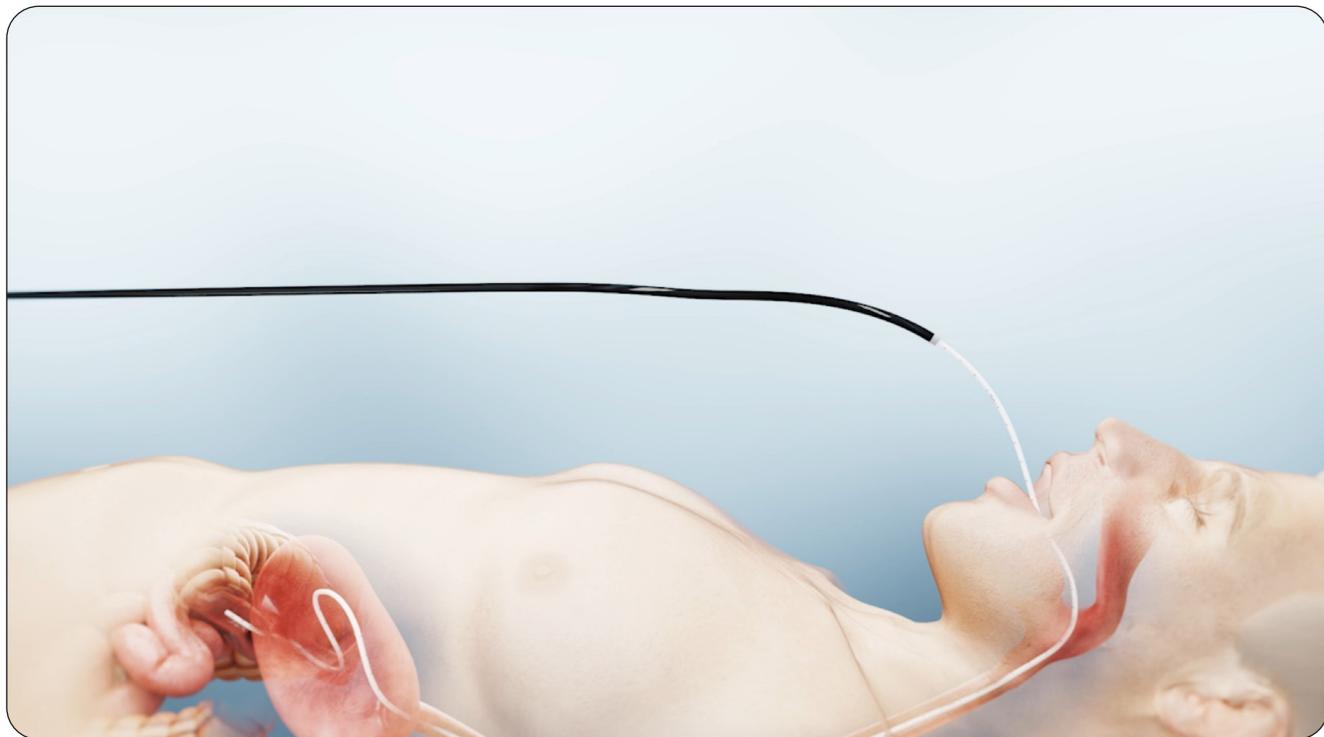


Insert the intestinal tube into the working channel of the endoscope.



The tube tip should be positioned as far as the ligament of Treitz which indicates the transition of the duodenum to the jejunum.

## Application via endoscope, oral re-routed to nasal insertion



Withdraw the endoscope while pushing the tube carefully in the opposite direction ensuring it remains in place. The tube should be fixed manually as soon as the endoscope emerges.



Insert the blue re-routing catheter into the patients nose and pull it out of the mouth using a laryngoscope and Magill forceps.

## Application via endoscope, oral re-routed to nasal insertion

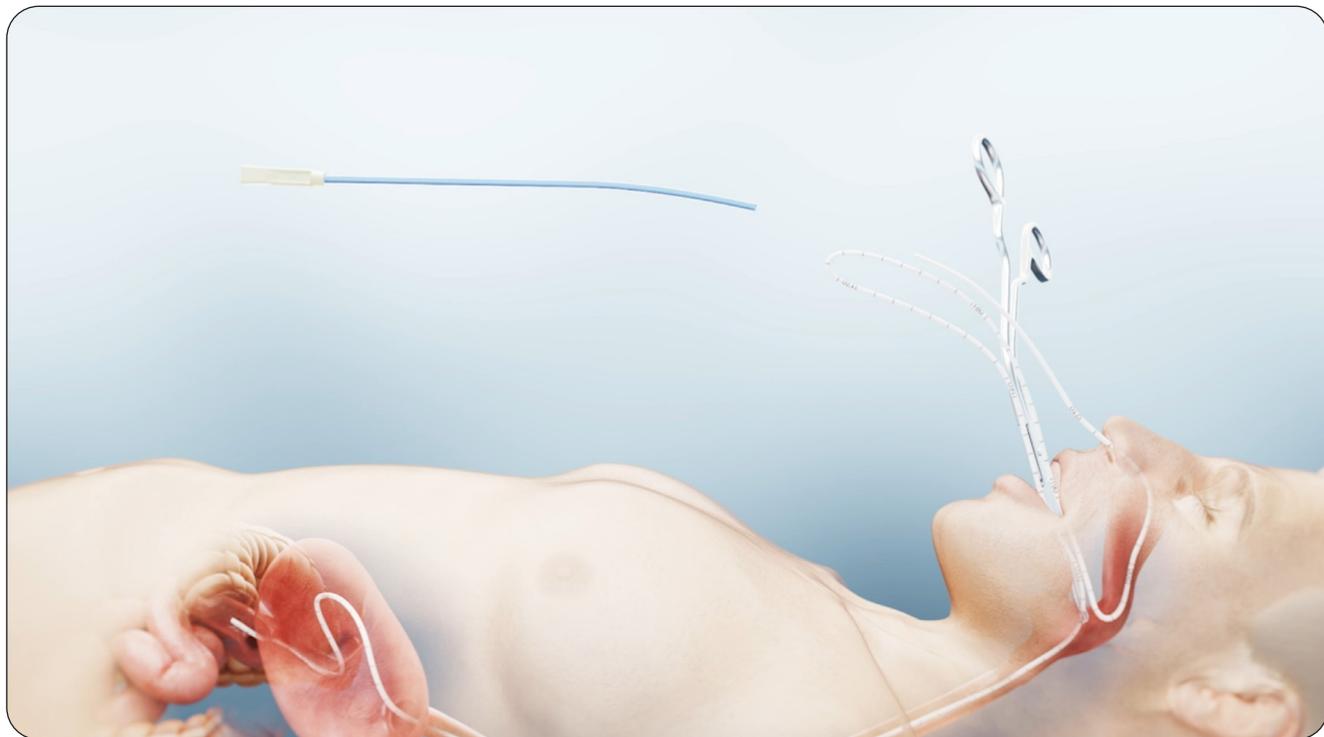


Insert the feeding tube into the oral end of the re-routing catheter.

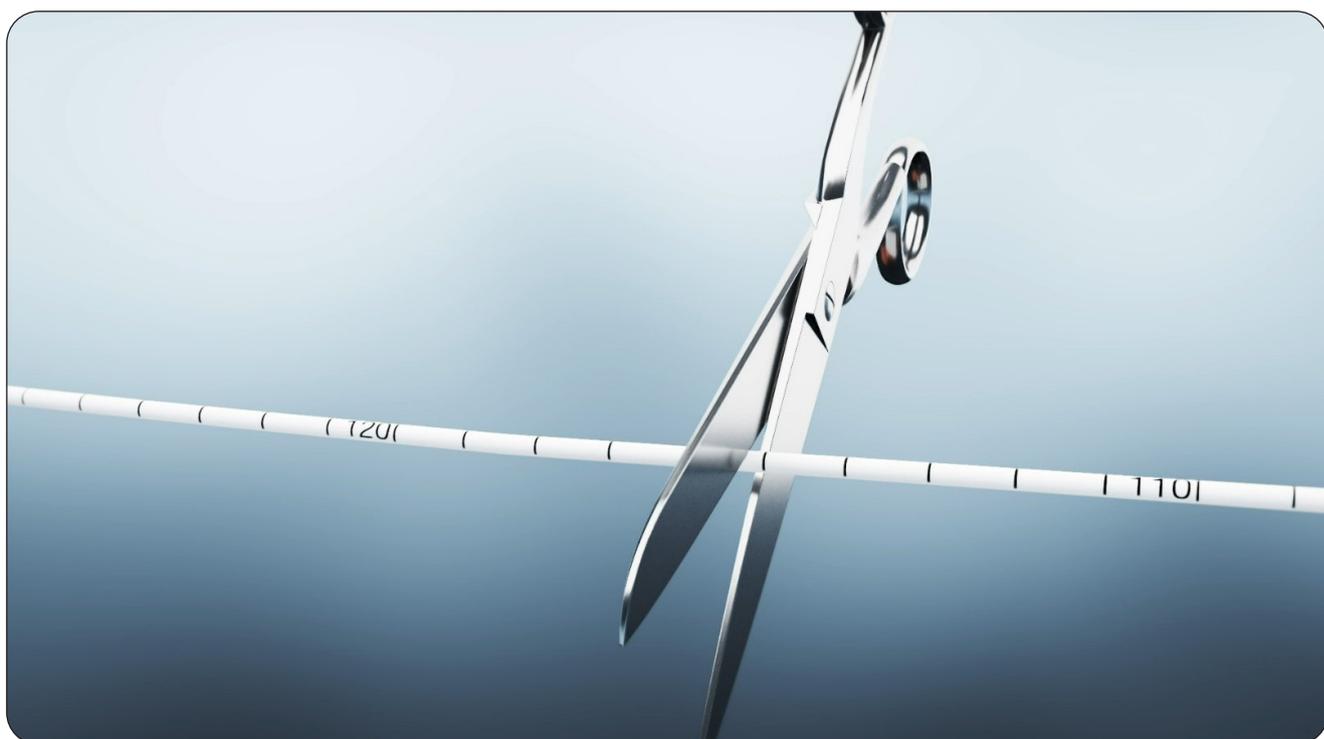


Re-route the feeding tube from oral to nasal through the re-routing catheter.

## Application via endoscope, oral re-routed to nasal insertion

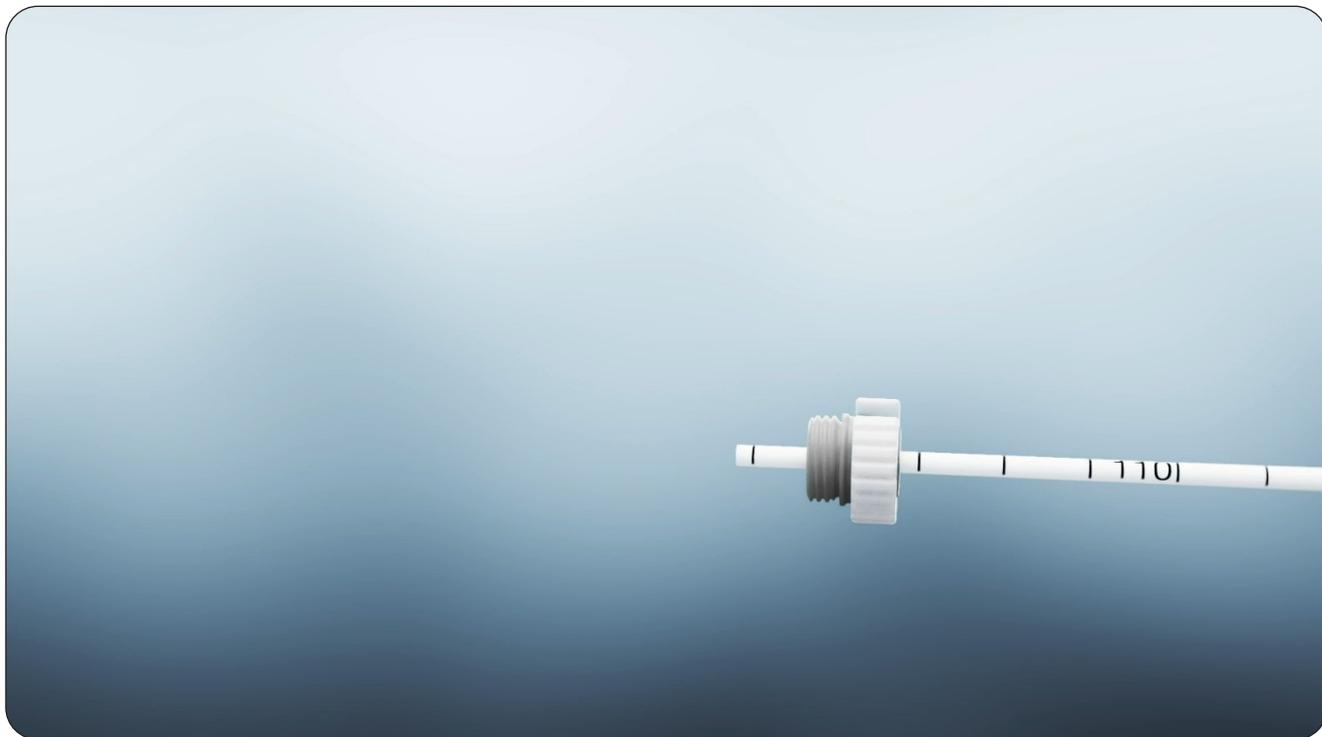


Remove the re-routing catheter. To avoid dislocation during this procedure the tube should be fixed in the throat using the Magill forceps. Fully re-route the tube through the nasal passage.

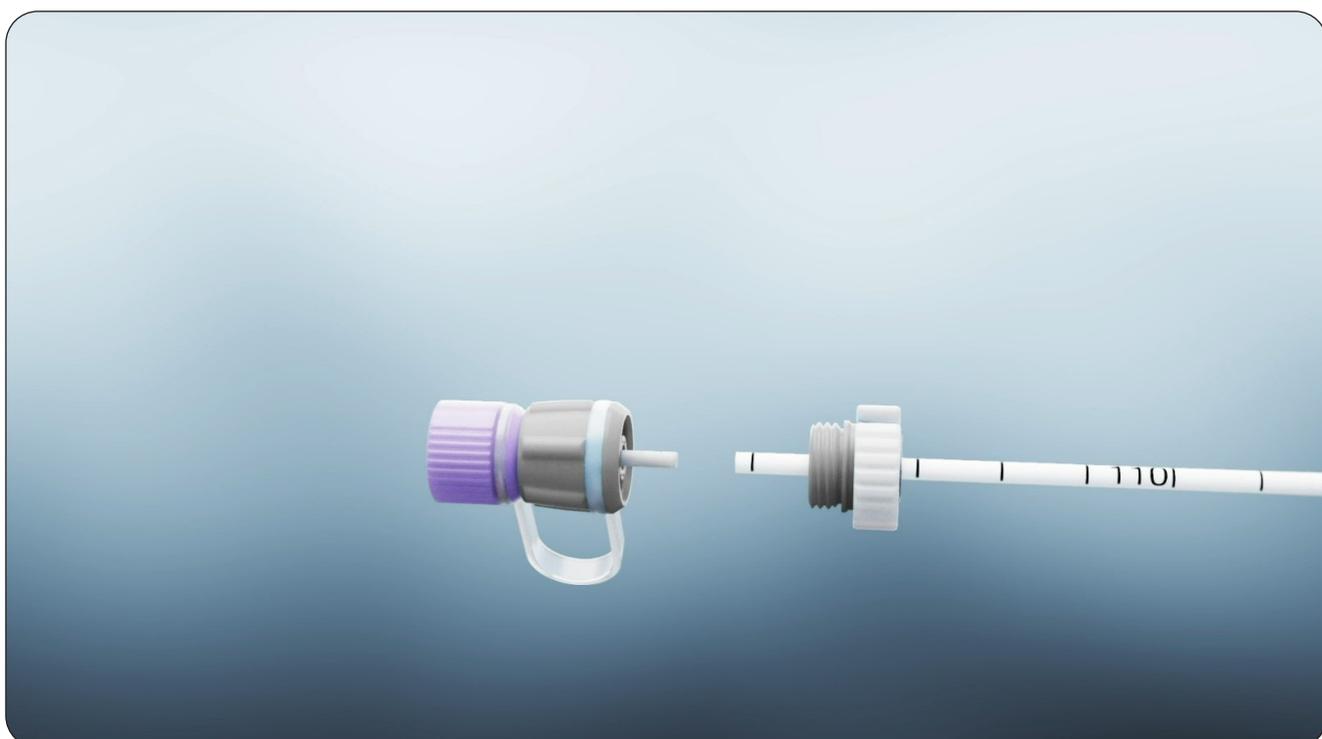


Cut the intestinal tube to desired length.

## Application via endoscope, oral re-routed to nasal insertion

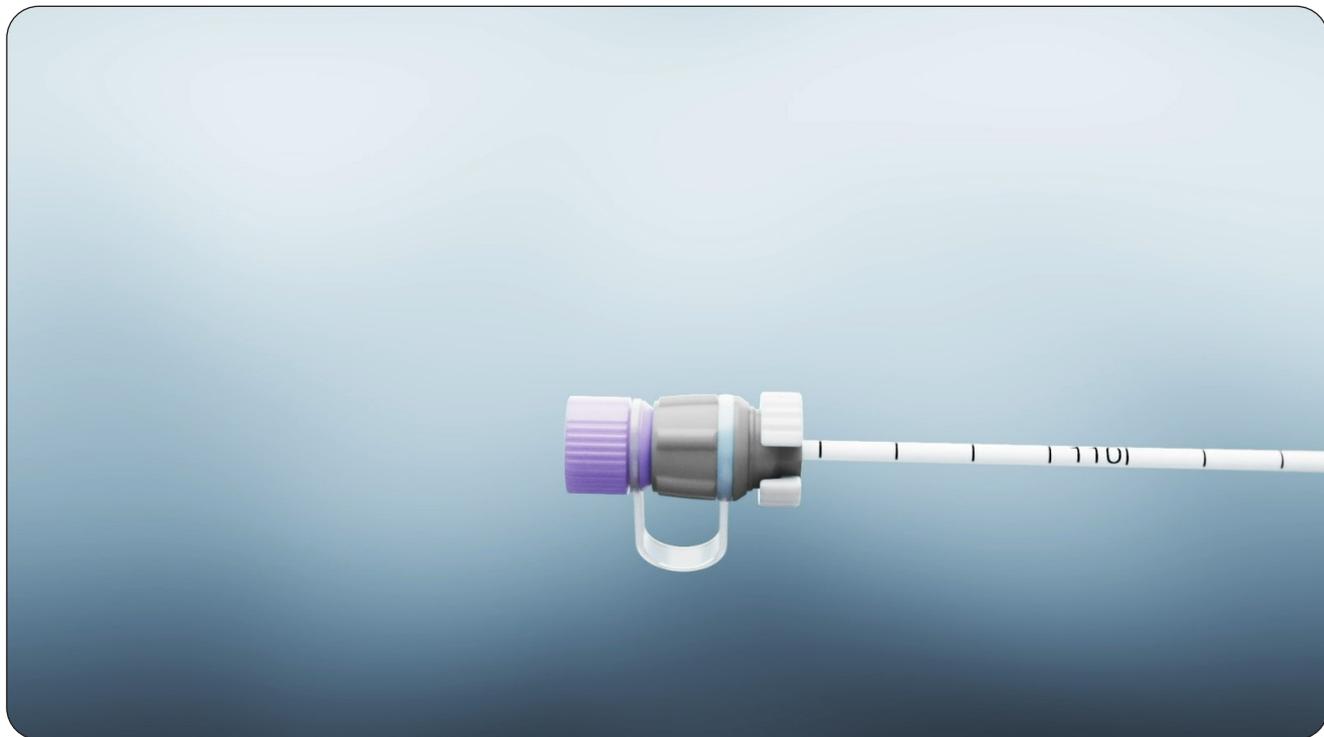


Advance the fastening screw over the tube.

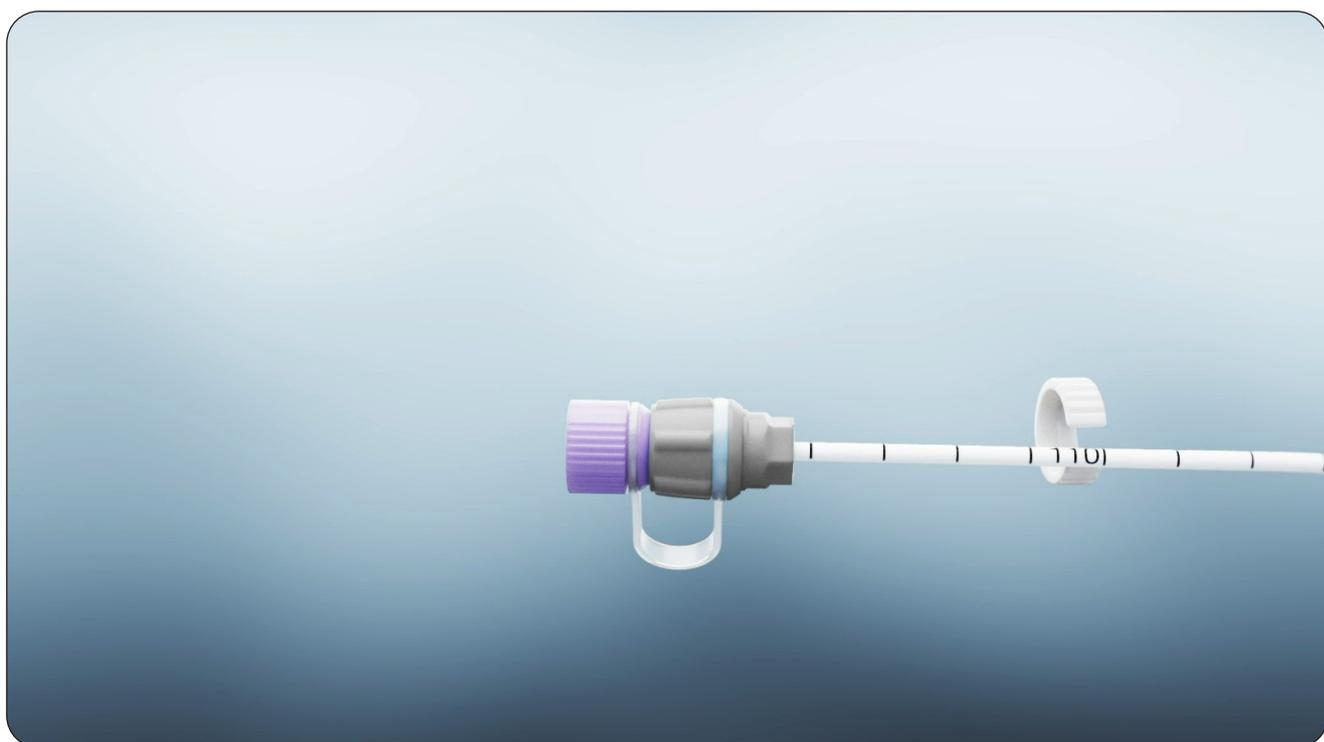


Insert the metal pin of the ENFit connector as far as possible into the intestinal tube

## Application via endoscope, oral re-routed to nasal insertion

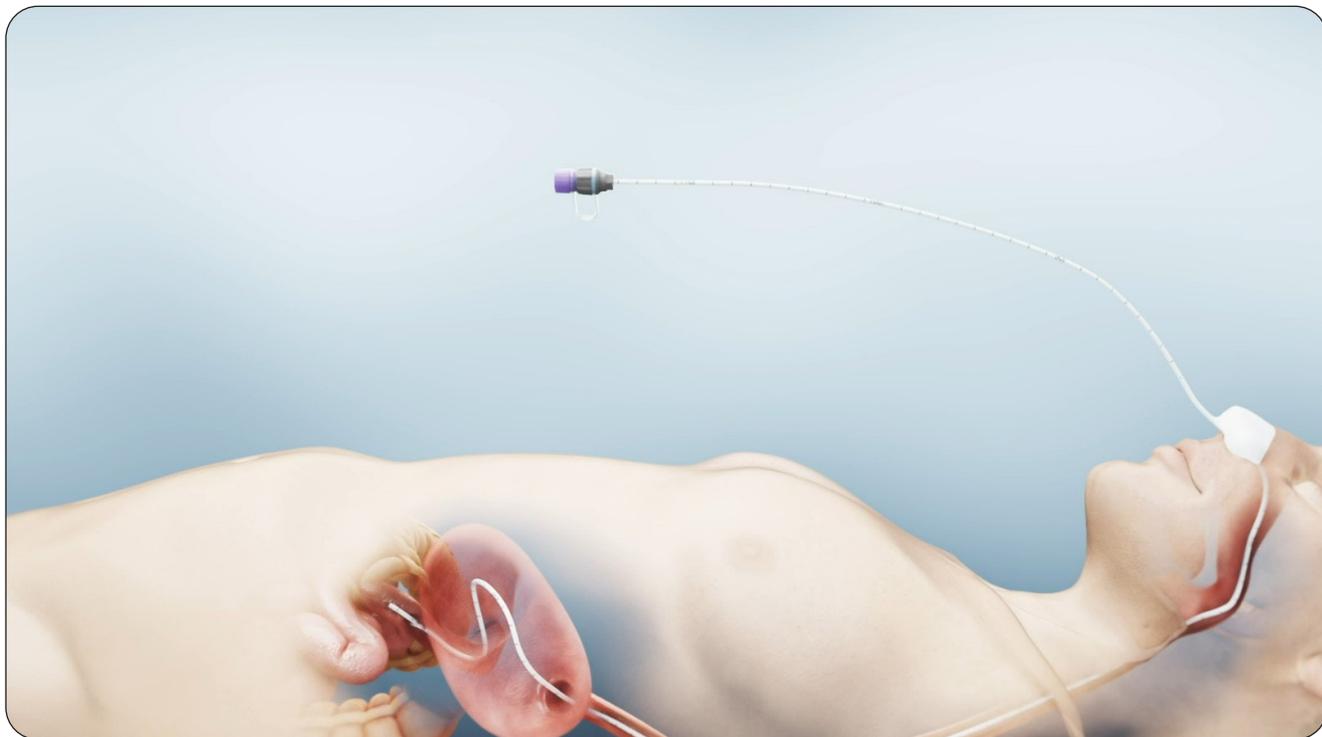


While holding the ENFit connector end of the assembly, screw the fastening screw into the ENFit connector assembly.



Remove the distal securing clip.

## Application via endoscope, oral re-routed to nasal insertion



Fix the Freka Endolumina in place with a suitable plaster.

The position of the tube should be confirmed radiologically.

**While it has been the objective of Fresenius Kabi to develop accurate, easy-to-follow insertion suggestions, each healthcare professional inserting this enteral product must evaluate the appropriateness of the following technique based on his or her medical training, experience and patient evaluation.**

# Instructions for use

## Placement of feeding tube

One option is detailed in this document for feeding tube placement although other placement techniques may be available.

### **Application via endoscope, oral re-routed to nasal insertion (using radiological confirmation)**

1. Select oral opening and clean oral passage.
2. Bring the patient's upper body into an upright or semi-upright position of approximately 45°.
3. Moisten endoscopic working channel with gel (or water or MCT oil).
4. Insert tip of endoscope and cautiously push into the back wall of the pharynx using slight rotating movements.
5. In unconscious patients, bend the head significantly forwards and slowly push the endoscope into the oesophagus.
6. Push the endoscope further forwards into the stomach. Insufflate with air if required.
7. Advance the endoscope through the pylorus into the duodenum then into the jejunum.
8. Insert and advance the feeding tube through the endoscopic working channel until it reaches the jejunum.
9. Remove the endoscope from the patient while ensuring the feeding tube remains in place.

### **Re-routing the tube from oral to nasal position**

10. Select nasal opening and clean nasal passages.
11. Moisten the blue re-routing catheter with a local anaesthetic gel and carefully introduce it through the nose and out through the mouth.
12. Now insert the intestinal tube through the opening of the re-routing catheter which exits the patients mouth, and withdraw it via the nose. Ensure that the tube is in position against the rear wall of the pharynx without any loops.
13. Remove the re-routing catheter. The intestinal tube is now in a transnasal position.

### **Connecting the ENFit adapter**

14. Cut off the intestinal tube to desired length and advance the fastening screw over the intestinal tube.
15. Insert the metal pin of the ENFit connector as far as possible into the intestinal tube and screw the fastening screw to the ENFit connector.
16. Remove the distal securing clip.

### **Verification and securing**

17. Fix feeding tube in place with adhesive tape.
18. Confirm correct position of feeding tube radiologically.
19. The feeding tube marking at the nostril must be documented.

## Instructions for use

### Important information

Irritations of the mucous membranes can occur during or after implantation of the Freka Endolumina - as is the case for all other feeding tubes. In individual cases, gastrointestinal bleeding can also occur, especially in patients with serious coagulation disorders or microcirculation disorders of the mucous membranes e.g. due to high-dose administration of catecholamines. In this case, use of the Freka Endolumina is subject to a risk assessment by the treating physician.

### Duration of use

The Freka Endolumina can remain in place for up to four weeks with careful feeding tube and nasal care. If enteral feeding continues to be necessary, the implantation of a percutaneous endoscopically controlled gastrostomy (PEG) is recommended.

### Aftercare of feeding tube

The feeding tube must be flushed before and after every application of nutrition - at least once daily with 20 mL lukewarm water, preferably with a 10-60 mL Freka Connect ENFit syringe.

### Important information

No acidic fluids, especially fruit teas or fruit juices, must be used as they can cause coagulation of nutrition constituents. The feeding tube must be replaced if blocked. The feeding tube lumen must not under any circumstances be forcibly unblocked under high pressure (i.e. using a small volume syringe) or using a mandrin. Otherwise, there is the risk of perforation of the feeding tube and injury to the patient.

### Application of medication

Medicinal products should preferably be administered through the feeding tube in a dissolved form. Medicinal products in liquid form are preferable.

### Important Information

The feeding tube must be carefully flushed before and after every administration of medicinal product. Under no circumstances must medicinal products be administered with nutrition. The pharmacist should be consulted if in doubt.

### Application of nutrition

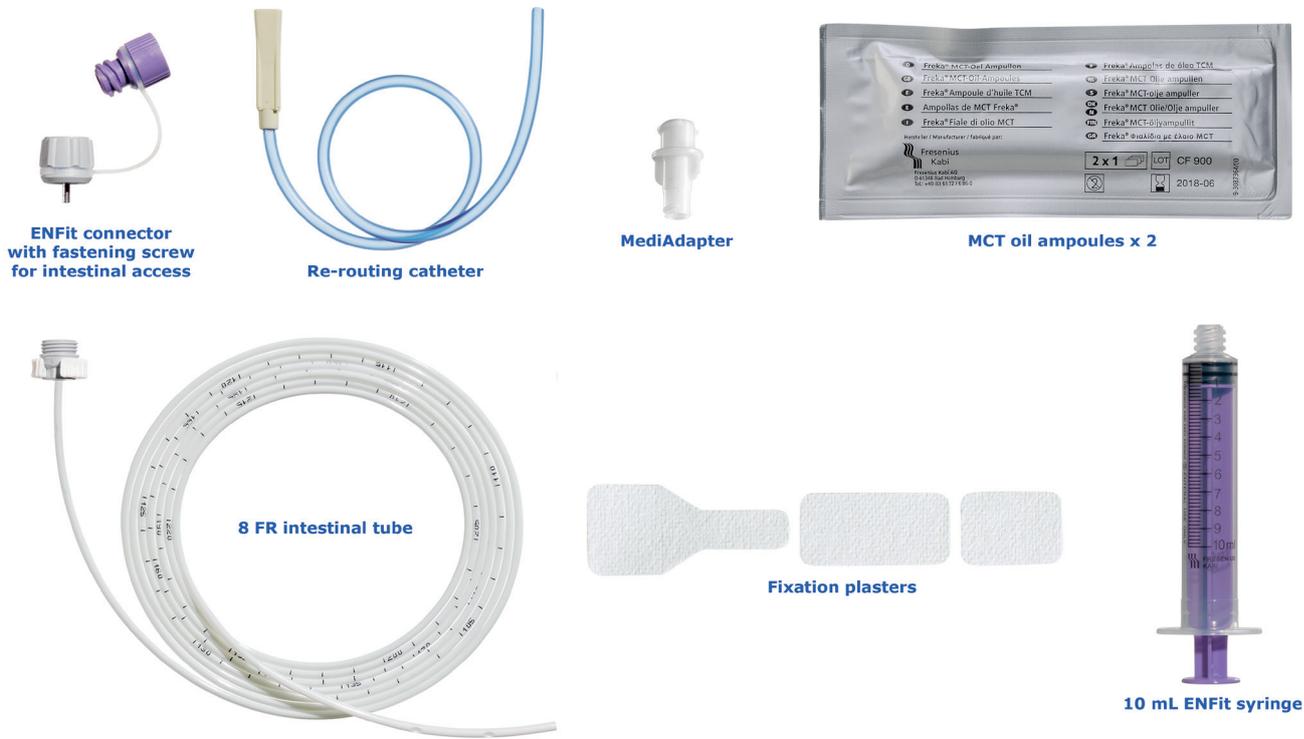
Feeding into the small intestine can commence immediately after implantation of the feeding tube. High-molecule nutrition or low-molecule oligopeptide diets can be used for jejunal tube feeding dependent on digestion and resorption performance. In any case, nutrition intake must be increased gradually. The nutrition supply must be continually pump-controlled.

### Important information

Do not use an infusion pump designed for parenteral application under any circumstances (risk of route confusion).



# Ordering information



**ENFit connector with fastening screw for intestinal access**

**Re-routing catheter**

**MediAdapter**

**MCT oil ampoules x 2**

**8 FR intestinal tube**

**Fixation plasters**

**10 mL ENFit syringe**

## Freka Endolumina with Insertion Kit

Single lumen transnasal tube

**Article code: 7981832**

Sales Unit: 5 x 1



**Freka Universal Funnel Adapter, ENFit**

**Freka Connect ENFit 60mL Syringe**

For compatibility of:

- ENLock sets to ENFit feeding tubes
- ENLock syringes to ENFit feeding tubes
- For decompression with drainage bags

**Article Code: 7755695**

Sales Unit: 1 x 15

Administration of nutrition and liquids. Compatible to male ENFit connectors. Sterile, single packed.

**Article code: 90007865**

Sales Unit: 30 x 1