

"Enteral feeding" refers to the delivery of a nutritionally complete feed containing protein, CHO, fat, water, minerals and vitamins directly into the stomach, duodenum or jejunum.

Patient selection

Enteral feeding should be considered for malnourished patients, or in those at risk of malnutrition who have a functional GIT but are unable to maintain an adequate or safe oral intake. E.g. Critically ill patients, post-op, pancreatitis, swallowing difficulty.

Access

Short-term access nasogastric (NG) or nasojejunal (NJ) tubes

Longer term: Percutaneous endoscopic gastrostomy (PEG) or jejunostomy if feeding > 1mo

NG tubes:

- Commonest
- Depend on adequate gastric emptying.
- They allow the use of hypertonic feeds, high feeding rates and bolus feeding into the stomach reservoir.
- Simple to insert, but are easily displaced.

NJ tubes

- Reduce the incidence of GOR and are useful in the presence of delayed gastric emptying
- Post-pyloric placement can be difficult but may be aided by intravenous prokinetics, tiger (toothed) tube, or fibre-optic observation.

PEG tubes:

- Indications: stroke, motor neurone disease, Parkinson's disease, supplemental nutrition, and head, neck or oesophageal cancer.
- CI: bleeding diatheses, local sepsis/tumour, unable to safely endoscope.
- Relative CI: GOR, ascites, severe obesity, portal hypertension, previous gastric surgery, gastric ulceration and gastric outlet obstruction.
- They are inserted directly through the stomach wall endoscopically or surgically, under antibiotic cover.

Percutaneous jejunostomy tubes:

- Always continuous infusion
- Early postoperative feeding and are useful in patients at risk of reflux.
- Inserted through PEG into the jejunum using a surgical or endoscopic technique or as far as possible into the duodenum and then peristalsis pulls the tube further.

PEG/PEJ Notes

- Feed semi-upright (>30°) and for 1 hr post feed.
- Check patency with 20ml warm water
- Maintain patency with q4-8h 20ml warm water flushes and flush after each feed.
- Avoid coarsely crushed medications if possible.
- If tube becomes blocked:
 - Instill tube with as much as possible of 20ml warm water (without high pressure), leave for 15min. Can also use carbonated drink (e.g. Coke) left for 30-60min in tube. Then alternate aspirating/injecting gently.
- Replace in ED with balloon catheter gastrostomy tube, button (or low profile) stomate, or an 18-20 Foley catheter if no PEG tubes available. Confirm with litmus, or contrast.