

"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.