Enteral Feeding Policy

Purpose
To ensure all staff involved in the care of a patient receiving enteral nutrition will adhere to the CDHB’s following requirements.

The international standard for enteral feeding is to use ENFit connectors. Almost all enteral feeding devices and connectors are now ENFIT at the CDHB.

Applicability
All Divisions and Rural Hospitals
- Medical Officers.
- Dietitians.
- Registered Nurses (RN).
- Enrolled Nurses within their scope of practice.
- Nursing Students within their scope of practice.
- Pharmacists within their scope of practice

Definitions
- **Gastric**: Relating to the stomach
- **Jejunal**: Relating to the jejunum (part of small intestine)
- **Paediatric**: <16 years old
- **Bolus**: A single large dose e.g. 200ml oral nutritional supplement

Clinical Indications
Healthcare professionals should consider enteral feeding in patients who are malnourished or at risk of malnutrition AND have:
- Inadequate or unsafe oral intake, and
- A functional, accessible gastrointestinal tract.

Adult patients
Enteral feeding should be considered in all adult patients
- Who are malnourished, as defined by any of the following:
  - A BMI of less than 18.5 kg/m2.
  - Unintentional weight loss greater than 10% within the last 3 – 6 months.
  - A BMI of less than 20 kg/m2 and unintentional weight loss greater than 5% within the last 3 – 6 months.
- Who are at risk of malnutrition, as defined by any of the following:
  - Have eaten little or nothing for more than 5 days and/or are likely to eat little or nothing for the next 5 days or longer.
  - Have a poor absorptive capacity, and/or have high nutrient losses and/or have increased nutritional needs from causes such as catabolism.
Healthcare professionals should ensure that patient/family/whanau/ carers are kept fully informed about enteral feeding.

**Paediatric patients**

Enteral feeding should be considered in Paediatric Patients:

- If an infant or child is unable to achieve adequate oral intake to meet nutritional requirements for growth and/or is faltering and/or has increased nutritional needs.
- Or as determined by the clinical team.
Decision Process – Enteral Feeding Algorithm
Other Important Considerations

- The extent to which the patient’s nutritional needs are met through ordinary eating and drinking.
- The length of time that intake has been inadequate and/or is likely to remain inadequate.
- The patient’s current medical conditions and current nutritional status in terms of BMI, recent unintentional weight loss and evidence of any specific nutrient deficiencies.
- Whether enteral feeding will serve the patient’s best interests in terms of both clinical outcomes and quality of life.

Routes of Delivery

Gastric
- Nasogastric.
- Oro-gastric.
- Gastrostomy.

Trans-pyloric
- Naso-jejunal.
- Gastro-jejunostomy.
- Jejunostomy.

Roles and Responsibilities

Medical Staff:
- Gain consent for enteral feeding, in discussion with patient, family, Dietitian, nurses.
- Liaison with nursing staff regarding the need for enteral feeding tube insertion, and patient monitoring and cares.
- Referral to Interventional Radiology/Gastroenterology Department if enteral feeding tube is to be placed radiologically/endoscopically.
- For children referral should be made to paediatric surgeons or to Interventional Radiology.
- Document enteral feeding decision in Clinical Notes.
- Liaison with Dietitian regarding the patient’s nutritional requirements and enteral feeding prescription.
- Organise an X-ray to confirm nasogastric tube placement before enteral feeding commences (unless correct placement confirmed radiologically)

Please Note: If nasogastric tube is placed endoscopically it will still require X-ray confirmation prior to use.

Please Note: in Paediatric patients in most cases tube placement is confirmed by pH testing. The pH level must be <5.
- Medical monitoring of relevant and indicated biochemistry parameters and fluid management with the Dietitian and nursing staff.

Dietitians:
- Nutrition assessment.
- Advice regarding enteral feeding formula selection and to provide the enteral feeding prescription.
- Organise provision of enteral feeding formula over 24 hours and daily delivery.
- Liaison with medical and nursing staff regarding the patient’s enteral feeding prescription.
• Document the patient’s enteral feeding prescription, in addition to documentation of on-going monitoring and modification in the patient’s clinical records.
• Monitor tolerance and evaluate efficacy of on-going nutritional support in liaison with medical and nursing staff.
• If working in Older Persons Health, liaise with your consultant when considering enteral feeding overnight.

**Nursing Staff:**
• Insertion and removal of the nasogastric tube as per Lippincott procedures or area specific procedure
• Management of Gastrostomy/Jejunostomy as per policy/procedure in this Associated document section.
• Document type of feeding tube placed and external length. Once placement is confirmed, mark the Adult feeding tubes exit point with permanent marker 2 cm below the nostril.
• Referral to pharmacy to review the patients’ medications are compatible with enteral feeding and administration via enteral feeding tube.
• Monitor the patient as per this policy and the associated Lippincott procedures.
• Obtain enteral feeding pump.
• Educate patient and Family/Whānau/Carers.
• Document enteral feeding.
• Monitor the enteral feeding tube site and patients’ skin integrity, and pressure injury risk management daily.
• Monitoring the enteral feeding tube securement and placement each shift – refer to the initial insertion documentation and marking.
• Performing regular oral cares (these cares are not routinely required for infants).
• Monitor and record the patient’s weight on patientTrack (baseline and minimum bi-weekly).
• Maintain a fluid balance chart (input and output) as indicated in the CDHB Fluid Balance Policy.
• In children pH testing can be used to check the position of a Nasogastric feeding tube. If a naso-jejunal tube is inserted or if the tube is unable to be aspirated, then an x-ray would be required.
• In adult patients an x-ray is needed to confirm the position of a nasogastric tube.
• Monitor gastric aspirates as documented on the enteral feeding prescription.

**Enteral Feeding Procedure**

The following are CDHB requirements additional to the Lippincott procedure link at the end of this section.

**Storage and Temperature considerations**
• Wherever possible, pre-packaged, ready-to-use enteral feeding formula should be used in preference to enteral feeding formula that require decanting, reconstitution or dilution.
• Sterile water must be used for flushing all enteral feeding tubes.
• Opened bottles of sterile water must be changed every 24 hours. **Please Note:** Neonatal NG tubes do not require routine flushing.
• Sterile water must be used for reconstitution of powdered formula.
• Infant formula/EBM should not be warmed for more than 15 minutes.
• Store stopped/halted enteral feeds in the patient’s room out of direct sunlight within the 24-hour hang time.

• If the room temperature during summer is of concern, the enteral feeding formula with the enteral feeding stand/pump could be moved to a cooler side of the ward during a stopped/halted period.

**Hanging Times**

• Infant formula and expressed breast milk (EBM) may hang for up to 4 hours.

• Decanted/reconstituted/diluted enteral feeds may hang for up to 8 hours.

• Ready to feed enteral formula may hang for 24 hours.

• Any breaks from enteral feeding must be considered within the recommended hang time. Breaking the line may increase the risk of contamination. Strict aseptic non-touch techniques must be used if disconnecting the line.

**‘Bedside’ management**

• Keep enteral feeding equipment covered and contained in one specific area near patient such as a tray, at bedside locker, over table especially for that purpose. Clean down area daily with detergent and water or disposable wipes.

• After each use clean the equipment in the kitchen, and then store dry at the bedside. Do not store syringes in water.

• All jugs, containers and syringes must be changed at the beginning of each shift.

• Designate syringes with their use i.e. flushing, aspirating, medication and/or bolus enteral feeds.

• Hand hygiene must be performed prior to accessing a device, preparing and connecting the formula as per CDHB Hand Hygiene Policy.

• Breaking the line may increase the risk of contamination, therefore strict aseptic non-touch technique must be used if disconnecting or reconnecting the line. This includes scrubbing the hub of the enterostomy tube with an alcohol wipe, allow it to dry and storing the port in the cap while not in use.

• Ensure cleanliness of the enteral feeding pump. Use a detergent wipe to remove any spills or visible contamination during use and to clean the pump after use.

• If used for a patient in transmission-based isolation precautions, the pump/equipment must be disinfected after cleaning e.g. Clinell wipes or sodium hypochlorite 1,000ppm (bleach)

**Prior to commencement of feeding**

• In liaison with the Dietitian and Medical Staff, confirm the order for enteral feeding.

• Check the placement of the enteral feeding tube as per above and CDHB related procedures for example, Gastrostomy or Jejunostomy documents.

• If there is any doubt regarding the placement of the enteral feeding tube, do not commence enteral feeding. Contact the Medical staff.

• Check Enteral Feeding Prescription regarding administration rate/bolus enteral feeding volumes and times, and enteral feeding formula hang times, NICU enteral feeds are prescribed on the Neonatal care plan.
  – Check the enteral feeding formula and expiry date against the enteral feeding prescription and patient label details. Neonatal enteral feed label checked against patient label and nutritional additives prescription.
Hand hygiene must be performed prior to preparing and connecting the formula as per the CDHB Hand Hygiene policy.

- Ensure the patient is in the semi recumbent position (elevated head and upper body by 30 - 45 degree angle) during enteral feeding, one hour post enteral feeding and while administering medications. Please Note: in paediatrics infants cots and incubators may be slightly raised to achieve this.
  - Patients nursed in the supine position are at high risk of regurgitation and aspiration.
  - Immobile patients or those in the ICU setting may be at increased pressure injury and aspiration risk. When raising the bed apply the knee brace at the same time to avoid sacral friction.

- For paediatric patients flush the enteral feeding tube with sterile water prior to commencing enteral feeds as per the enteral feeding prescription to ensure patency - Warm sterile water flushes are more effective at clearing the tube and preventing blockages than cold.

<table>
<thead>
<tr>
<th>Age</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 6 months</td>
<td>1-5ml</td>
</tr>
<tr>
<td>6 months-2 years</td>
<td>5-10 mL</td>
</tr>
<tr>
<td>Over 2 years</td>
<td>10 mL</td>
</tr>
</tbody>
</table>

**Continuous/Intermittent Enteral Feeding via Pump**

- Minimal handling and an aseptic non-touch technique must be used to connect the enteral feeding giving set to the enteral feeding formula and the patient’s enteral feeding tube or to break or reconnect the line

Please Note: Do not use scissors or other sharp instruments to pierce the ready to hang formula bottle as it increases the risk of bacterial contamination. Use the cap spike, or the screw cap giving set (that will cut the foil when screwed onto the enteral feeding formula bottle).

- Connect the enteral feeding giving set to enteral feeding formula

Please note: Do not discard the enteral feeding giving set tubing cap if for intermittent enteral feeding. This should be used to prevent contamination of enteral feeding giving set/enteral feeding system when not in use.

- Change enteral feeding giving sets and cap every 24 hours.
- Label the enteral feeding giving set with date and time of commencement.
- Label the enteral feeding formula with date and time of commencement.
- Place the drip chamber/enteral feeding giving set and prime the enteral feeding giving set with enteral feeding formula ensuring the drip chamber is not over filled
  - Neonatal cots/incubators bed ends are slightly elevated but not more than 30 degrees
  - Note: in NICU flushes are not required in NGT unless indicated by clinical team
- Special consideration must be taken for patients requiring prone positioning. Enteral feeds should be paused, and nasogastric tubes should be aspirated prior to change in position.
- GRVs (Gastric residual volumes) are advised to continue 8 hourly while patients are in the prone position, even if tolerance is not an issue.
- Assessing the position of the nasogastric tube after placing the patient in the prone position is important to assess the potential risk of pressure injury and tube dislodgment
### Bolus Enteral Feeding

- Follow the bolus feeding prescription or relevant care plan - for flushes, enteral feeding bolus volumes and times.
- Gravity is the preferred method for large bore feeding tubes e.g. Gastrostomies. Slow push method can be used if a gravity flow cannot be achieved.
- Syringe method is used for fine bore enteral feeding tubes with the exception of Paediatric NG’s (where the gravity method is used).
- Shake enteral feeding formula before opening.
- If ‘tab pull’ enteral feeding formula cans are used, swab lid prior to opening with an alcohol swab.
- Place tip of syringe securely in the enteral feeding port of the enteral feeding tube (if gravity feeding remove the plunger prior). Measure indicated volume of water to be flushed and pour into syringe. Not required in NICU.
- Measuring the volume of feeding formula is not required in NICU as the syringe size will be determined by the feed may vary from 1ml – 50ml.
- Repeat sterile warm water flush using indicated volume as per bolus feeding prescription.
- Secure cap on end of enteral feeding tube.

See under “Prior to commencement of feeding” heading for Paediatric flush volumes.

### Monitoring and Documentation requirements

All patients require monitoring for tolerance to the enteral feeding. Each shift, monitor, document and report abnormalities to medical team and Dietitian. Refer to the enteral feeding/bolus feeding prescription for monitoring parameters.

**Weight**
- In adults and Paediatrics: Baseline, then daily or minimum bi-weekly weighing (if possible) as indicated by Dietitian and/or medical staff as per area protocols.

**Oral health**
- Assess mucosal lining for signs of dehydration or the presence of infection as part of the regular mouth cares.
- Paediatrics, including NICU as clinically indicated – EBM drops used to help with oral health and hygiene in conjunction with enteral feeds.

**Enteral feeding tube**
- Monitor enteral feeding tube position and insertion site as per tube specific policy.
- All enteral feed and flush volumes administered must be documented on the FBC/ or on the relevant observation charts specific to the area e.g. NICU.
- If full amount of enteral feeding formula is not delivered, document in clinical notes, with reasons why this has happened.
- Time and duration of enteral feed breaks.
- Monitoring management in nursing care plan (see below).
- Monitor Intolerance issues and document in clinical notes.
Blocked Enteral Feeding Tubes

Prevention

- Ensure regular flushing of enteral feeding tube every four to six hours or as per enteral feeding prescription.
- Naso-jejunal tubes should be flushed every three hours unless patient has been provided with a joey pump.
- Flush enteral feeding tube with sterile water before, after and between administering each medication or as per enteral feeding prescription. This helps to prevent interactions between formula and medication.

Actions (if feeding tube is blocked)

- Massage tube – this may loosen blockage.
- Use sterile warm water and a push pull action/pulsatile with a 20 mL ENFit syringe.
- Do not use coke to unblock enteral feeding tubes as this may damage the tube. Acidic flushes such as coke cola can exacerbate tube occlusion by causing feed to coagulate or protein to denaturize.
- For blockages caused by enteral feeding formula a digestive enzyme preparation (Creon) can be used (this requires prescribing and ordering from pharmacy.)
- If the above processes do not unblock the feeding tube, Clog Zapper can be used when enteral feeding formula has blocked the tube. This does not need to be charted.

Enteral Feeding Related Sepsis

- Monitor patients who are at high risk of enteral feeding related infections for signs and symptoms of sepsis.
- At risk patients include:
  - Those who are being fed by a route that bypasses the stomach (acidic gastric juices) e.g. via a jejunostomy or Naso-Jejunal or PEJ enteral feeding tube.
  - Immunocompromised patients.
- Monitor enteral feeding formula and equipment to ensure hang times, delivery set changes etc. are consistent with policy.

If sepsis occurs

Inform medical staff of any signs and symptoms of sepsis. Administration of Medication during Enteral Feeding

- Prior to commencing enteral feeding all patients must be referred to the pharmacist for review of medication regime, route and availability of medication in liquid form or whether tablets are crushable. NICU administration of medications is covered in Neonatal drug protocols on the NICU common drive.
- Do not crush enteric-coated, time-release tablets or capsules, cytotoxic, vitamin A derivatives, prostaglandins or hormone antagonists.
- Do not mix medication with enteral feeding formula.
- Do not mix medications together.
- Check if medication is compatible with the enteral feeding tube – some medications may adhere to the enteral feeding tubing, e.g. Phenytoin.
• Alternatives may be prescribed, where medication cannot be crushed or is unavailable as liquid formulation. Check with ward pharmacist and medical team.

• For proper action, some medications must be delivered to the stomach. If the tube is in the duodenum or jejunum, check with Pharmacist before administering the medication.

• Some medications need to be administered with enteral feeding formula/food while some medications need to be administered on an empty stomach and enteral tube feeding needs to be withheld for a prescribed time interval before and after medication is given. Check with Pharmacist.

• Give medications at appropriate time in relation to feeding:
  • If a tablet can be crushed, it must be crushed finely and dispersed well in at least 20 mL of water.
  • Stop enteral feeding to administer each medication separately.
  • Flush the enteral feeding tube between each medication. It may take 20-30 mins to complete medication administration. If this is not practical check with the ward pharmacist.
  • Use an ENFit syringe to flush the enteral feeding tube with 15 – 30 mL of sterile water as per enteral feeding prescription before and after administering each medication via the enteral feeding tube. Please note: Water flushes with medications in paediatric patients should be 5ml or less.
  • Allow to stand for a few minutes as the binding agents in the tablets (e.g. starch) sometimes continue to absorb water after crushing.
  • Liquid medication, e.g. paracetamol must be mixed with water in adult patients as it is too thick for enteral feeding tubes. Tablets crushed are less likely to block the tube.

Refer to Administration of drugs via enteral feeding tubes and their specific drug information

Cessation of Feeding Regimes

• Follow Dietitian’s enteral feeding prescription for the transition from enteral feeding to oral intake.
• Enteral feeding should be discontinued when the patient can maintain adequate nutrition and hydration orally.
• Detailed records of food and fluid are required to accurately assess nutrition and fluid intake.
• Remove enteral feeding tube following Dietitian or Medical team instruction.
• Any enteral feeding tube not being used, continue to flush with sterile water twice daily.

Discharging a Patient on Enteral Feeding

Criteria for Home Enteral Feeding

Paediatric patients will be seen by Neonatal or Children’s Outreach Services

• Inability to meet nutritional requirements by oral intake.
• Clinically stable and safe for discharge.
• Quality of life will be maintained/improved by enteral feeding.
• Patient/carer is compliant and competent with administering flushes and medications and the patient tolerates the enteral feeding.
• In adult services patients with a percutaneous endoscopic gastrostomy, percutaneous endoscopic jejunostomy and jejunostomy must be seen by the Enteral Nutrition Nurse Specialist prior to discharge. Other considerations.
Patients requiring enteral feeding at home must be established in hospital on their enteral feeding prescription prior to discharge.

The Dietitian must be informed of any patient being discharged into the community on an enteral feed, with ideally two working days.

Patients established on an enteral feed during this hospital admission will require a discharge planning meeting with medical and nursing staff, Dietitian, and other multi-disciplinary team members as appropriate.

Patients/whānau/carer must be able to independently manage their tube cares and enteral feeds and receive education prior to discharge home.

For patients being discharged to a rest home and hospital level care liaise with rest home/hospital to ensure they have adequate resources to manage the patient being enterally fed.

For patients already established on enteral feeding in the community check with the Dietitian before discharge.

Pharmacy are required to review medications prior to discharge if patient is unable to take these orally.

**Staff Responsibilities for Patient Discharge**

**Nursing**

Notify either

- For Adult patients nursing staff are to provide a referral to community district nursing.
- For Paediatrics the Children’s Outreach Team.
- For Neonates the NICU Outreach nurse and discharge facilitator.
- Of patients impending discharge if patient has a NG, PEG, PEGJ, and Jejunostomy.
- Provide the patient/whānau/carer with education on the management of their enteral feeding including:
  - Management of the enteral feeding tube, including monitoring tube position.
  - Administering the enteral feed; the enteral feeding prescription including setting up the enteral feed system, how to use the feeding pump for continuous enteral feeding, the likely risks and methods for troubleshooting common problems.
  - Flushing the enteral feeding tube.
  - Administering medications via the enteral feeding tube.
  - Written information on who to contact with any troubleshooting issues.
- For adult patients provide three days’ supply of catheter tip syringes, and four days’ supply of enteral feeding giving sets from ward stock.
- In Paediatrics, provide two weeks supply of enteral feeding consumables.
- In Paediatrics, complete a cortex referral to Children’s Outreach Nursing Team and fill in the cortex consumable request form.

**Dietitian**

- Ensure the patient is established on and tolerating the enteral feeding prescription.
- Provide the patient and or carer with
  - A written feeding regime for home (bolus or pump)
  - The relevant ‘tube feeding from home’ document (available on Allied Healthways)
− An enteral feeding pump and pole.
− Short term supply of enteral feeding formula, maximum four days.

• Organise on-going supply of enteral feeding giving sets.
• Arrange a special authority number for special foods and prescription for enteral feeding formula.
• Inform the GP of special authority number/application for special foods/enteral feeding formula as required.
• In Paediatrics, ensure that a copy of the special authority number is documented in the patient file.
• In adults’ referral to Community Dietitian for patients discharging into the community or referral to appropriate hospital-based Dietitian for hospital transfer.
• If patient is discharging into a Rest Home or Private Hospital – liaise with the facility nurse manager regarding any education required by the enteral feeding pump
• Document pump loan details on the Home Enteral Nutrition equipment database located on Allied Healthways.
• In NICU and Paediatrics document required information on Home Enteral Nutrition (HEN) database.
• In NICU and Paediatrics, place enteral feeding consumables requests form in notes for Nurses to complete and fax as per form.

Medical Staff

• Ensure patient is medically stable for discharge.
• Review medications for compatibility via enteral feeding tube with pharmacist.
• Review medications for availability and funding in the community.
• Inform GP via discharge summary that the patient is receiving home enteral feeding.
• In paediatrics, medical staff to refer to Enteral Feeding Clinic as required and provide Outreach with a clear plan for care once child is discharged.

Educational Requirement for Patient Discharge

Upon discharge from hospital, the patient/whanau/carer will now understand:

• How the function of gastrointestinal tract has changed and the reason for enteral feeding.
• The enteral feeding prescription.
• How to change malfunctioning parts of the enteral feeding tube.
• How to manage the enteral feeding system: continuous feeding via pump or bolus feeding via syringe.
• Storage, hang time, and means for provision of enteral feeding formula.
• The principles of hygiene.
• How to prevent and recognise complications such as infection, aspiration, and mechanical complications such as occlusion or misplacement of the enteral feeding tube, including how to irrigate a blocked enteral feeding tube.
• Contact details for the community/hospital Dietitian, gastrostomy CNS, supply department, enteral feeding pump representative.
• Follow up arrangements.

The patient/carer will be able to:

• Check the enteral feeding tube position.
• Administer medication down the enteral feeding tube.
• Flush the enteral feeding tube.

**Bolus feeding**
• Administer a bolus feed down the enteral feeding tube.

**Continuous pump feeding**
• Prepare enteral feeding system for administration – set up the enteral feeding giving set and enteral feeding pump.
• Connect and disconnect the enteral feeding system to the enteral feeding tube.
• Administer the formula as per enteral feeding prescription

**After Hours Enteral Feeding at Weekend and Public Holidays**
• Refer to Hospital Health pathways for Dietitian on call hours. Contact on call Dietitian via switchboard.
• Public Holidays limited cover as advised prior to each public holiday.

**Key Performance Indicators**
• This policy will be audited using an audit tool developed to assess the safety, delivery and prescribing of enteral feeds. The audit will be done on all patients currently on enteral feeds at the time of the audit. This will exclude ICU patients.
• The enteral feeding audit will occur every 6 months.
• Dietitians will be responsible for completing the audit and reporting results.
• Outcomes of the audit will be in a written report and given to medical staff, nursing staff and nursing quality groups with supporting education and training if required.

**Supporting material**
• Adult Gastrostomy and Jejunostomy feeding tube management, ref: 2403808.
• Artificial Feeding Policy, ref: 2400254.
• Patient’s Care Plan.
• Enteral Feeding prescription C2600055, ref: 2405259
• Bolus Feeding Prescription (C260054), ref: 2401787.
• Fluid Balance Chart (C000887), ref: 2401568.
• Weight Chart, ref: 2403126.
• Clinical Record (QMR003)
• Food and Fluid Chart (Adult Rehabilitation), reference no: 2402115.
• Food and Fluid Chart (Nutritional Services) ref: 2400094.
• Hand Hygiene Policy, ref: 2405524.
• Gastric Tube Placement Neonates – PPN-31, ref: 2400638.
• Feeding Continuous Gavage – PPN05, ref: 2400282.
• Enteral Consumables Request (C240178), ref: 2401237.
• Administration of drugs via enteral feeding tubes.
Lippincott procedures

- Paediatric NGT Insertion - Lippincott Procedure.
- Paediatric NGT Removal - Lippincott Procedure.
- Lippincott procedure - Enteral tube feeding - intermittent or bolus, paediatric or adult.

References

- ASPEN safe practices for enteral nutrition therapy. JPEN 2017
- Canadian Practice Guidelines for nutrition support in mechanically ventilated critically ill adult patients. Journal of Parenteral and Enteral Nutrition, V:27; No.5; Sept 2003 Pg. 355-373.
- AuSPEN Clinical Practice Guidelines for Home Enteral Nutrition in Australia.
- Handbook of Drug Administration via Enteral feeding Tubes, Rebecca White and Vicky Bradman 2007, on behalf of BPNG.
- Practical approach to Paediatric Enteral Nutrition: A comment by the ESPGHAN committee on Nutrition. JPGN 2010.
- AuSPEN Nutrition management for Critically and Acutely Unwell Hospitalised Patients with COVID-19 in Australia and New Zealand. 2020
- Dr James Falvey Gastroenterologist recommendation on tube placement verification.
- Healthinfo: NG or NJ tube feeding at home.
- Healthinfo: Tube feeding at with a gastrostomy at home.