

**Chapter 1 : Enteral Nutrition | Adult | Pediatric | Chartwell**

*This ASPEN pathway provides steps and resources for managing critically-ill adult patients requiring enteral nutrition (EN), starting at needs assessment through transition out of the ICU.*

The tube is usually placed into the stomach, duodenum or jejunum via either the nose, mouth or the direct percutaneous route. Patients receiving ETF should be reviewed regularly to enable re-institution of oral nutrition when appropriate. Most enteral feeding tubes are introduced at the bedside but some are placed surgically, at endoscopy or using radiological techniques, and some are inserted in the community. Whenever possible the patient should be aware of why this form of nutrition support is necessary, how it will be given, for how long, and the potential risks involved. Innumerable questions regarding best ETF practice could be asked but for these guidelines, reviews were restricted to studies providing potential guidance on the indications for ETF, studies on the benefits of ETF compared to oral or parenteral nutrition, and studies on some technical aspects of delivering enteral feeds. No studies on different types of enteral feed were reviewed.

**General Indications for Enteral Tube Feeding in hospital and the community** 9. The aim is to improve nutritional intake and so improve or maintain nutritional status. The GI tract must be accessible and functioning sufficiently to absorb the feed administered. Common indications for ETF are listed in Table 18, although this is not necessarily an exhaustive list. If ETF is unsafe or unlikely to be successful e. Indications for enteral tube feeding. The findings from these studies do not therefore provide help with decision making for routine clinical practice. The recommendations were therefore derived using expert opinion.

**Recommendations for clinical practice** 9. Indications for enteral tube feeding Healthcare professionals should consider enteral tube feeding in people who are malnourished 38 or at risk of malnutrition 39 and have: Enteral tube feeding versus standard care 9. Introduction Some patients are put at potential risk of malnutrition or worsening of pre-existing malnutrition through a limitation of oral intake or absorptive capabilities from effects of their disease or direct and indirect consequences of surgery e. If this limitation is severe and long-lasting, nutrition support using ETF or PN will be needed but ETF could also be beneficial for patients who are likely to have limited intake for only a few days as in most post-operative patients, especially if they already malnourished. However, the benefits from using ETF in this elective, supplementary role is uncertain and it is possible that the risks might outweigh any clinical benefits. Two reviews were therefore conducted to identify: Studies of ETF vs. Four of these compared the effect of patients receiving 12 to 24 hours of nasogastric tube feeding plus continued normal hospital diet with patients receiving a standard hospital diet only, , , One study compared nasogastric feeding with standard hospital diet plus ad lib snacks 20, while another had two intervention arms in which patients received a nasogastric feed with amino acids alone or a nasogastric feed containing amino acids plus carbohydrates. The control group continued on a normal hospital diet. A further study compared oesophagostomy tube feeding with a clear liquid diet, advancing to a normal diet as tolerated and one investigated the benefits of pre-operative ETF nasogastric tube feeding compared with routine hospital diet. The final study examined the effect of perioperative nutrition in malnourished head and neck cancer patients using three intervention arms: The patients included in the studies were orthopaedic hip fracture patients four studies covering patients 20, , , , people who were generally malnourished one study covering 86 patients, malnourished surgical patients one study covering patients, total laryngectomy patients one study covering 67 patients, malnourished patients undergoing surgery because of a head and neck malignancy one study covering 49 patients and patients with alcoholic liver disease two studies covering 66 patients 52, Clinical evidence ETF vs. Mortality was reported in 8 studies 20, 52, , , , , One study, noted a higher mortality rate for the patients who were tube fed but again no p-value was reported. There were no significant differences in postoperative complications reported in four studies, , , ; nor in the incidence of pressure sores in one study; diarrhoea in one study, or infection rates in one study. In one study the incidence of wound infection, nausea and vomiting were lower in the ETF group although no p-value was reported. Five studies reported that ETF had no influence on length of hospital stay, , , , ; although in one study 20, median time to independent mobility was lower in the ETF group p 0. In the third study 7 out of 67 patients receiving

ETF Cost-effectiveness evidence ETF vs. One RCT evaluated insertion of double-lumen gastrojejunostomy tube compared with routine care by the surgeon after pancreaticoduodenectomy. Half the patients in the routine care arm received PN ; and the other group probably received NG feeding but the route of feeding was unclear. The study found significant reductions in gastro-paresis and in costs. The second RCT compared early nasogastric enteral feeding with early oral feeding after colorectal resection in cancer patients. They found that early oral intervention was safe but there were no cost savings or improvements in clinical outcomes. The aim of the retrospective study was to test whether there were cost savings in using tube-feeding rather than a carer manually feeding the patient which requires expensive staff time and risks causing aspiration for patients with advanced dementia. The difference was due to tube feeding placement cost and hospital costs arising from complications directly related to tube feeding. However, the sample size of this study was small 11 patients in each group and potentially biased since it was a convenience sample. The fourth cost-effectiveness study evaluated the cost of preoperative enteral nutrition The study was a sensitivity analysis based on the two small trials with the largest reduction in complication rate. However, they found that home preoperative ETF is more likely to be cost saving. There were no economic studies evaluating pre and post-operative ETF. Studies of early post-operative ETF vs. There were 11 studies included in this review: In this section we have included the six studies from the systematic review that looked at the effect of early postoperative ETF. In addition to the studies from this systematic review, we identified 17 further studies that looked at the effect of early post-operative ETF versus no early post-operative nutrition. The RCTs were analysed according to the type of surgical patients included in the studies. Five studies included patients undergoing upper GI surgery 45 , , , , Table Three studies included patients undergoing lower GI surgery , , Table Six studies included both upper and lower surgery 27 , 58 , , , Table Three studies included patients undergoing hepatobiliary surgery , , Table Six studies included acute trauma patients 65 , 98 , , , Table We extracted data on seven outcomes: Where appropriate we pooled the data for these outcomes. We were unable to pool the data for LOS as the studies reported the data in different units and information needed to convert these units was not available. The P value from tests for heterogeneity was greater than 0. We also conducted a combined analysis which included all the surgical studies Appendix Eight: This also identified no statistically significant differences in any of the outcomes extracted which included vomiting, anastomotic dehiscence, pneumonia, intra-abdominal abscess, wound infection and mortality. Table 19 Outcomes reported in studies of early enteral tube feeding No.

### Chapter 2 : Enteral Intolerance | Abbott Nutrition Health Institute

*Page 2 of 5. Adult Enteral Nutrition Algorithm3, For patients with a functional GI tract, EN is the preferred method of nutrition support.*

### Chapter 3 : Adult Nutrition | Edgepark Medical

*Enteral feeding refers to the delivery of a nutritionally complete feed, containing protein, carbohydrate, fat, water, minerals and vitamins, directly into the stomach, duodenum or jejunum. [1] Enteral nutrition is often used for children as well as for adults. [8] Children may require enteral.*

### Chapter 4 : Abbott Nutrition Brands and Nutrition Products for Adults

*Chartwell offers one of the largest and most extensive adult and pediatric enteral nutrition programs in the country. Our first-rate services include a clinical intervention program led by registered dietitians that is designed to assess the appropriateness of formula, along with the correct dosage and frequency of treatment.*

### Chapter 5 : Enteral Feeding. Enteral nutrition (EN) information. Patient | Patient

*Enteral Nutrition Care includes: Patients have access to one of the largest selections of enteral formulas, supplies, and pumps in the industry, with over nutritional formulas available.*

### Chapter 6 : Enteral Services - Enteral Nutrition Therapy > Home

*In this multicenter, double-blind, randomized trial, we compared energy-dense enteral nutrition with standard enteral nutrition in critically ill adults. The use of energy-dense nutrition.*

### Chapter 7 : Enteral tube feeding in hospital and the community - Nutrition Support for Adults - NCBI Books

*Enteral nutrition should be considered when an individual is not safe for oral intake (for example in dysphagia or reduced level of consciousness) or when oral intake is not adequate to meet their nutritional requirements (for example when appetite is poor and needs are increased).*

### Chapter 8 : Nutrition Support for Adults - NCBI Bookshelf

*Enteral nutrition support for surgical patients: Surgical patients who are: malnourished 22 and have; inadequate or unsafe oral intake and a functional, accessible gastrointestinal tract and are due to undergo major abdominal procedures, should be considered for pre-operative enteral tube feeding.*