Sources of Information

Data Sheet
The summary of product characteristics (SPC) should contain some information about the formulation.

Manufacturer
Administration of a drug via a feeding tube usually falls outside the terms of its product licence and therefore some manufacturers may be unwilling to provide information. However, most manufacturers do have some information on file and may be able to offer assistance.

Ask your Local Pharmacist
Most pharmacists will be familiar with the formulations available, and communication between GP and Community pharmacist should be encouraged to ensure that the patient’s treatment is not delayed.

Medicines Information Department
Most acute hospitals and some community hospitals have a medicines information department within the pharmacy department that will be able to assist you.

Who produced the guidelines?
These guidelines were produced by a multi-disciplinary team, with the support of BAPEN and the BPNG.

BAPEN
The British Association for Parenteral and Enteral Nutrition was founded in 1992 from the association of several professional groups representing clinicians, nursing, dietetics, pharmacy, industry and patients. The aim of this group is to promote good practice in all areas of nutrition support.

BPNG
The British Pharmaceutical Nutrition Group, founded in 1988, is an organization with a professional interest in pharmaceutical nutrition support. The members of this group are pharmacists, technicians and scientists from the health service, academia and industry.

Drug Administration Via Enteral Feeding Tubes

A Guide for General Practitioners and Community Pharmacists

Produced by the British Association for Parenteral and Enteral Nutrition
www.bapen.org.uk Registered Charity 1023927
and The British Pharmaceutical Nutrition Group
www.bpng.co.uk
Types of Feeding Tubes
Most patients on home enteral feeding in the community have a gastrostomy e.g. (PEG) tube. Although nasogastric (NG) and jejunostomy tubes are also used.

Preferred Formulations
Liquids or soluble tablets are the preferred formulation for administration via feeding tubes. However, it should be noted that some liquid preparations are in fact suspensions of small granules and therefore not suitable for administering via an Enteral Feeding Tube e.g. Lansoprazole suspension.

- Some liquid preparations contain sorbitol which can act as a laxative
- The cost of liquid preparations can sometimes be considered prohibitive however the cost of replacing a feeding tube is far greater.
- Soluble tablets are a useful alternative.

Legal Implications
Most drug administration via feeding tubes falls outside the product license for that drug, as does crushing tablets and opening capsules not specifically designed for this purpose. In these circumstances the prescriber and practitioner accept any liability for any adverse effects resulting from the administration of that drug.

Drug Interactions
Interactions between enteral feeds and drugs can be clinically significant.
As a general rule if the absorption of a drug is affected by food or antacids, it is also likely to be affected by enteral feed.

Clinically Significant Interactions
Phenytoin Ciprofloxacin
Theophylline Tetracyclines
Digoxin Rifampicin
(This list is not exhaustive).

Why are these guidelines necessary?
The use of enteral feeding tubes as a route of drug administration is becoming increasingly common. This guidance has been produced in response to the increasing demands for information on the practical aspects of drug administration via this route.

General Considerations
Patient’s medication should be reviewed regularly and any unnecessary medicines stopped. Using the feeding tube to administer a drug should be considered a last resort, and whenever possible an alternative route should be used. Changing drugs within the same therapeutic group may be necessary e.g. changing oral isosorbide mononitrate to transdermal GTN.
Where possible a once daily preparation should be used to reduce the number of manipulations, but this must be by using long acting drugs not sustained release preparations. Bioavailability may vary between solid and liquid dosage forms. It may be necessary to adjust the dose. Avoid changing the brand of product used. Formulations of the same drug may vary between manufacturers.
Liaison between doctor and pharmacist is often beneficial.

Tube Blockage
Inadequate flushing and medication administration are the two most common causes of feeding tube blockage. Tube blockage is a serious problem that can deprive the patient of essential fluid, nutrition and drug therapy. This may necessitate replacement of the feeding tube potentially subjecting the patient to an invasive procedure.

- Adequate flushing should prevent this.
- If blockage occurs, aspiration to remove curds/particulate matter from the tube can be tried. This should be followed by attempt to flush with warm water.
- Excessive pressure should not be applied due to the risk of tube fracture.
- The patient should have a point of contact for advice in this eventuality.