



Title: Medication Administration via Enteral Feeding Tubes: Evidence and Guidelines

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Research question:

1. What is the evidence that more than one medication can be administered at a time through an enteral feeding tube?
2. What are the guidelines for administration of medications through an enteral feeding tube?

Methods:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 2, 2008), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international HTA agencies, and a focused Internet search. Results include articles published between 2003 and June 2008, and are limited to English language publications only. No filters were applied for the search concerning administration of more than one medication through an enteral feeding tube. A guideline filter was applied to the search regarding the guidelines for administration of medications through an enteral feeding tube. Internet links are provided, where available.

Results:

HTIS reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews and meta-analyses are presented first. These are followed by randomized controlled trials, observational studies and evidence-based guidelines.

One systematic review, two observational studies and two guidelines were identified from the literature search results. No health technology assessments or randomized controlled trials were identified.

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Health technology assessments

No literature identified

Systematic reviews and meta-analyses

1. Phillips NM, Nay R. Nursing administration of medication via enteral tubes in adults: a systematic review. *Int J Evid Based Healthc* 2007;5(3):324-53. Available: <http://www.blackwell-synergy.com/doi/abs/10.1111/j.1479-6988.2007.00072.x> (accessed 2008 Jun 12).

Randomized controlled trials

No literature identified

Observational studies

2. van den Bemt PM, Cusell MB, Overbeeke PW, Trommelen M, van Dooren D, Ophorst WR, et al. Quality improvement of oral medication administration in patients with enteral feeding tubes. *Qual Saf Health Care* 2006;15(1):44-7. [PubMed: PM16456209](#)
Available: http://igitur-archive.library.uu.nl/phar/2008-0424-200844/bemt_06_qualityimprovementoforalmedication.pdf (accessed 2008 Jun 16).
3. Seifert CF, Johnston BA. A nationwide survey of long-term care facilities to determine the characteristics of medication administration through enteral feeding catheters. *Nutr Clin Pract* 2005;20(3):354-62. [PubMed: PM16207674](#)

Guidelines and recommendations

4. Lees A, Wilson S, Young J, Lloyd A. *Medicines policy*. Bolton (UK): Bolton Primary Care Trust; 2008. Available: http://www.bolton.nhs.uk/foi_pubscheme/policy_store/CGMEDP02.doc (accessed 2008 Jun 16).
Note: see 16.0 Administering drugs via enteral feeding tubes, page 18
5. *Guidelines for the management of enteral tube feeding in adults*. Stormont (UK): Clinical Resource Efficiency Support Team (CREST); 2004. Available: <http://www.crestni.org.uk/tube-feeding-guidelines.pdf> (accessed 2008 Jun 16).
Note: see 5.3.5. Flushing feeding tubes, page 37

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Appendix – Further information:**Review articles**

6. Magnuson BL, Clifford TM, Hoskins LA, Bernard AC. Enteral nutrition and drug administration, interactions, and complications. *Nutr Clin Pract* 2005;20(6):618-24. [PubMed: PM16306299](#)

Additional references

7. White R, Bradnam V. *Handbook of drug administration via enteral feeding tubes*. London: Pharmaceutical Press; 2007.
8. Phillips MS. Handbook of drug administration via enteral feeding tubes. *Am J Pharm Educ* 2007;71(5):99. Available: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2064898> (accessed 2008 Jun 17).
9. Wick JY. The ins and outs of medication delivered by enteral tube. *Consult Pharm* 2006;21(8):659-62. [PubMed: PM17080584](#)
10. Dant B. Interactions between medications and enteral feeds. In: *Medication Update: August 2006* [website]. Seattle (WA): Children's Hospital and Regional Medical Center; 2006. Available: http://www.seattlechildrens.org/health_care_professionals/resources/medication_update/medication_update_0608.asp#interactions (accessed 2008 Jun 17).
11. Cornish P. "Avoid the crush": hazards of medication administration in patients with dysphagia or a feeding tube. *CMAJ* 2005;172(7):871-2. [PubMed: PM15795404](#)
12. Niccoli S, Bencivinni A, Chini G. Administration of solid oral drugs via gastric tube. *Connect: World Crit Care Nurs* 2005;4(3):114-5.
13. New information resource on administration of drugs via enteral feeding tubes aims to reduce risk to patients. In: *Media: press releases* [website]. Worcershire (UK): British Association for Parenteral and Enteral Nutrition (BAPEN); 2003. Available: http://www.bapen.org.uk/res_press_rel6.html (accessed 2008 Jun 17).
14. Pickering K. The administration of drugs via enteral feeding tubes. *Nurs Times* 2003;99(46):46-9. [PubMed: PM14666822](#)
Reproduced in: *NNNG News* 2004;(2):4-5. Available: http://www.nnng.org/Newsletters/NNNG_Iss2.pdf (accessed 2008 Jun 17).