

# Choosing medicines for patients unable to take solid oral dosage forms

Selecting suitable formulations for adult patients with swallowing difficulties or feeding tubes.

A stepwise approach is suggested:

## STEP 1

### Use a licensed medicine in a suitable formulation.

For example:

- Licensed liquid preparation
- Soluble tablets
- Powders or granules for suspension

In order to use a licensed medicine, consider switching to a different agent in the same class, or to a different route of administration.

For example, consider:

- Fluoxetine liquid (licensed preparation) as an alternative to sertraline tablets.
- Aspirin dispersible tablets instead of clopidogrel tablets.
- HRT patches instead of tablets.

### Consider the patient's method of feeding:

Patients on liquid feeds may take oral liquid medicines, dispersible tablets or solid preparations dispersed in water prior to administration. For patients on thickened fluids, liquid medicines can be mixed with products like *Thick and Easy*.

Patients on soft-food diets may be able to swallow crushed tablets or the contents of capsules given with food.

Patients with enteral feeding tubes may have oral medicines given by this route.

### Why licensed status matters

To be granted a licence a medicine must meet quality standards and be shown to be safe and effective. Licensed medicines usually come with a patient information leaflet and are considered the safest choice.

Special-order medicines are unlicensed and are not required to meet the same standards as licensed medicines. Prescribers take greater responsibility when using them.

***In most cases a licensed preparation will be available that meets the patient's needs.***

### Cost

Special-order medicines are often considerably more expensive than licensed medicines. They may have short shelf-lives compared with licensed alternatives and may need fridge storage.

For example, bendroflumethiazide liquid is 75 times more expensive than tablets:

- 28 doses of 2.5mg tablets costs 80p.
- 30 doses of 2.5mg/5ml liquid (150ml) costs £60.

NB: Bendroflumethiazide tablets can be dispersed in water for administration orally or via feeding tubes.

## STEP 2

### Use a licensed medicine in an unlicensed manner, for example by crushing / dispersing tablets in water or by opening capsules.

For example:

- Ramipril capsules can be opened and the contents mixed with water.
- Bendroflumethiazide tablets can be dispersed in water.

Both the above examples are suitable for administration orally or via a feeding tube.

Not all medicines are suitable for administration in this way and it is important to check beforehand. See below for where to get advice.

As before, consider switching to a different agent or route of administration in order to use a licensed product.

## STEP 3

### In the few situations where there is no licensed option, consider using a 'special'.

Special-order ('special') liquid medicines are unlicensed and expensive. They should only be used if there is no licensed medicine that meets the patient's needs.

### Is it needed?

If the patient is taking medicines that aren't needed or aren't working, stop or change them.

***Care staff may only give licensed medicines in an unlicensed way if there is a written direction in the patient's care plan.***

***Practical directions are overleaf.***

**Licensed medicines should be used where possible.  
Special-order medicines are unlicensed and expensive and should only be used if there is no licensed alternative.**

To check if tablets or capsules can be dispersed, crushed or opened use the Colchester University Hospital guidelines for tablet crushing and administration via enteral feeding tubes to check for appropriateness of crushing tablets or opening capsules. Link:

<https://www.nessexccg.nhs.uk/uploads/files/A.%20Guideline%20for%20tablet%20crushing%20in%20patients%20with%20swallowing%20difficulties.pdf>

It is an unlicensed use to crush tablets, open capsules and make extemporaneous suspensions. However, using medications within these guidelines is covered by the APC for legal/vicarious liability.

## Practical directions

**Always check beforehand if a tablet is suitable for dispersing / crushing, or a capsule suitable for opening.**

### • Crushing / dispersing tablets

Many immediate-release tablets can be dispersed in water without crushing; some medicines need crushing first. Some tablets (e.g. modified release) are not suitable for crushing.

For medicines that are suitable for crushing, crush using a pestle and mortar, a tablet crusher or between two metal spoons.

Only crush medicines one tablet at a time; do not crush all the patient's medicines together. Crushing or dispersal should only be performed immediately before administration.

### • Opening capsules

Some hard gelatin capsules can be opened and their contents mixed with water or administered with food. Some capsules are too small to manipulate. Capsules should only be opened immediately before administration.

### • Giving medicines in soft food

Some capsule contents or crushed tablets can be given with cold soft food such as a teaspoon of yoghurt or jam. Use a small amount of food to ensure the full dose is taken.

Crushed tablets or capsule contents may taste very bitter to patients taking them orally. Mask the taste by giving with strong flavours such as blackcurrant.

Medicines should only be administered in food with the patient's knowledge and consent. Hiding medication in food is considered 'covert administration' and advice must be sought if this is considered necessary.

### • Administering medicines via feeding tubes

Feeding tubes should be flushed with water before and after each medicine is administered. If a liquid medicine is thick or syrupy, dilution may be required. Some patients are fluid restricted; this needs to be taken into account.

When administering crushed tablets or opened capsules via a feeding tube, add the powder to 15-30ml water and mix well. Draw into a 50ml oral syringe and administer. If you have used a mortar or tablet crusher, rinse this with water and administer the rinsings also.

Suggested protocol for administering medicines via feeding tubes:

1. Stop the feed (leaving a feeding break if necessary).
2. Flush the tube with 30ml water.
3. Prepare the first medicine for administration, and give it.
4. Flush with 10ml water.
5. Repeat stages 3 and 4 with subsequent medicines.
6. Flush with 30ml water.
7. Re-start the feeding (leaving a feeding break if necessary).

**Care staff may only administer medicines in an unlicensed manner on the instruction of the prescriber.**

**A written direction to crush or disperse tablets or to open capsules must be documented in the patient's care plan.**

## Where can I get advice?

For further advice on choosing appropriate dosage forms contact your CCG medicines management team or UKMi medicines information centre.

Contact details for UKMi medicines information centres are available at [www.ukmi.nhs.uk](http://www.ukmi.nhs.uk). Click on the map then search for your local or regional centre.

### • Medicines Q&A

This leaflet accompanies a *Medicines Q&A* document which provides further information and lists options available in several therapeutic areas for adult patients with swallowing difficulties or feeding tubes.

Access it online via the NICE evidence page <https://www.evidence.nhs.uk/search?q=%22Therapeutic%20options%20for%20patients%20unable%20to%20take%20solid%22>

### • Reference texts

Details of two respected texts are in the reference section.

**Only prescribe special-order medicines if there is no suitable licensed medicine available that meets the patient's needs.**

**It may be appropriate to use a licensed medicine in an unlicensed way.**

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<b>Previous version</b>	<b>Key Changes</b>
July 2014	Addition of Colchester hospital Guidelines for tablet crushing, April 2014
Feb 2015	Minor update - Updated link to Colchester hospital guidelines for tablet crushing. May 2016
August 2017	Minor update – Updated link to Colchester hospital guidelines for tablet crushing. May 2017
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