



# Medication Safety Series: MSS 8

## Administration of medicines in relation to food & other special instructions

In order to facilitate the safe and effective administration of medicines, all individuals involved in the prescribing, monitoring and administration of medication should ensure that the relevant cautionary and advisory labels regarding administration of medication, as detailed in the British National Formulary (BNF) - e.g. before food, with or after food - are clearly documented on the prescription and administration record chart (kardex) and appropriate arrangements are made to ensure these are adhered to throughout the duration of an in-patient stay. (See [Appendix 1](#) for detailed guidance).

### Prescriber

- For each drug prescribed where it is known that additional administration advice should be followed, add any additional information to the comments/special instructions box on the kardex (with initials/date)
- Ensure medication that should be administered before, with or after food is prescribed at appropriate times on the kardex where possible
- Where it is not possible for medication to be prescribed or administered at the optimal time, ensure the reasons for this are clearly documented within the electronic patient record (EPR)
- Alert nursing staff to any specific administration requirements outside of normal administration times to enable a plan to be put in place to facilitate optimal administration

### Pharmacy Team

- For each drug prescribed, check that the prescribed administration times allow for the drug to be administered correctly, if necessary get the drug re-prescribed at a more appropriate time.
- Where a medication needs to be taken with or after food, check that the patient is eating at meal times; if necessary get re-prescribed and/or consider the risks/benefits of treatment.
- Ensure an appropriate nursing plan is in place to facilitate any administration requirements outside of the normal administration times.
- If the drug is a critical medicine – endorse **“critical medication – do not omit doses unless advised by prescriber”**.
- Check with ward pharmacist/annotate accordingly any other specific medication that should not be omitted (See [Appendix 1](#)).
- Ensure appropriate warnings/precautions are in place for specific drugs as follows:
  - Antithrombotic drugs – increased risk of bleeding especially after falls; this warning should be added to comments box of relevant drug and the front of the kardex.
  - Cytotoxic drugs – should be annotated as “cytotoxic” and a HSE information sheet on the safe handling of cytotoxic drugs should be stored with the patients kardex.
  - Methadone/buprenorphine – ensure naloxone for potential overdose is prescribed in line with TEVV methadone and buprenorphine inpatient prescribing guidelines.

### Nurse

- For each due dose of a drug with administration/special instructions or precautions/warnings, ensure that these are followed; initial/date the kardex once each drug has been administered.
- Where a drug is not administered, add the appropriate omission code to the kardex and document the reason for not administering the drug on the EPR.
- If this is a repeated problem or occurs with a high risk medication, discuss with the ward pharmacist or prescriber as soon as possible.

### Patient advice

#### For patients self-administering medication on the ward or at the point of leave/discharge:

- Ensure the patient is informed about any special instructions, precautions or warnings about taking their medication.

Appendix 1: Administration advice (taken from BNF online plus bespoke TEWV guidance).

The list is not intended to be exhaustive - please refer to the BNF for each drug. Please note: there is no guidance provided on the use of BNF warning 1 to 3 relating to drowsiness and ability to drive/operate machinery. The use of these warnings is a clinical decision to be made for individual patients by the pharmacist and the multi-disciplinary team. Also, BNF warnings 9&10 are not applicable on charts. For abbreviations – see key.

BNF advisory no.	Administration warning	Why is this important	Brief examples of drugs
4	Warning: Do not drink alcohol	To be used with medicines where there is an interaction or adverse reaction between alcohol and the medication	Metronidazole, disulfiram
5	Do not take indigestion remedies 2 hours before or after taking this medicine.	To be used for preparations where the absorption is reduced by indigestion remedies / antacids.	Aspirin (GR), gabapentin, lansoprazole (not orodispersible), sodium valproate (GR)
6	Do not take indigestion remedies, or medicines containing iron or zinc, 2 hours before or after taking this medicine.	To be used for preparations where the absorption is reduced by indigestion remedies / antacids, iron or zinc containing preparations.	Doxycycline, lymecycline
7	Do not take milk, indigestion remedies, or medicines containing iron or zinc, 2 hours before or after taking this medicine.	To be used for preparations where the absorption is reduced by milk, indigestion remedies / antacids, iron or zinc containing preparations.	Ciprofloxacin, demeclocycline caps, oxytetracycline, tetracycline
8	<b>Do not omit any doses unless on advice of prescriber.</b> <i>(reworded from BNF code 8 – Warning: Do not stop taking this medicine unless your doctor tells you to stop)</i>  <b>Critical medication - do not omit doses unless advised by prescriber</b> <i>(reworded from BNF code 8 – Warning: Do not stop taking this medicine unless your doctor tells you to stop)</i>	To be added by pharmacist using their judgement /knowledge of patient for the examples shown.  To be added by all clinical staff for specific critical medication.	Allopurinol, baclofen, beta-blockers, centrally acting antihypertensives, leprosy drugs (dapsone and clofazimine), steroid inhalers, nedocromil & sodium cromoglycate inhalers, high dose steroids, tizanidine, tuberculosis drugs (ethambutol, rifampicin)  Anti-infective medicines, Antiepileptics (for epilepsy). Anti-thrombotic drugs (warfarin, rivaroxaban, apixaban, dabigatran, edoxaban, tinzaparin, enoxaparin, dalteparin), clozapine, immunosuppressant or immune-modulating drugs for transplant rejection, insulin, lithium, Parkinson's medication, phytomenadione
11	Protect skin from sunlight—even on a bright but cloudy day. Do not use sunbeds	To be used on preparations that may cause phototoxic or photo-allergic reactions if the patient is exposed to ultraviolet radiation. Many drugs other than e.g. phenothiazines and sulfonamides may, on rare occasions, cause reactions in susceptible patients. Exposure to high intensity ultraviolet radiation from sunray lamps and sunbeds is particularly likely to cause reactions.	Amiodarone, chlorpromazine, doxycycline
13	Dissolve or mix with water before taking	To be used on preparations intended to be dissolved in water (e.g. soluble tablets) or mixed with water (e.g. powders, granules) before use. In a few cases other liquids such as fruit juice or milk may be used.	<b>Soluble tablets, sachets, powders and granules</b> e.g. Sando K®, Cosmocel®
14	This medicine may colour urine. This is harmless.	To be used on preparations that can cause harmless discolouration, mainly red or bluey/green tinges.	Co-beneldopa, co-careldopa, entacapone, nefopam, nitrofurantoin, rifampicin, sulfasalazine
21	Take with or just after food, or a meal.	To be used on preparations that are liable to cause gastric irritation, or those that are better absorbed with food. Patients should be advised that a small amount of food is sufficient.	Aspirin (non-GR & dispersible), lurasidone, melatonin MR, metformin, metronidazole, nitrofurantoin, sodium valproate MR and crushable, trazodone, valproic acid  <b>NSAIDs</b> , i.e., ibuprofen, ketoprofen, mefenamic acid, nabumetone, naproxen, piroxicam etc.
22	Take 30 to 60 minutes before food.	To be used on some preparations whose absorption is improved when taken before food.	Lansoprazole (not orodispersible), perindopril,
23	Take this medicine when your stomach is empty. This means an hour before food or 2 hours after food.	To be used on oral preparations whose absorption may be reduced by the presence of food and acid in the stomach.	Flucloxacillin, oxytetracycline, phenoxymethylpenicillin, quetiapine MR, tetracycline
24	Suck or chew this medicine.	To be used on preparations that should be sucked or chewed.	<b>Chewable preparations i.e.</b> calcium carbonate chewable, hyoscine hydrobromide,
25	Swallow this medicine whole. Do not chew or crush.	To be used on preparations that are enteric-coated or designed for modified-release. Also to be used on preparations that taste very unpleasant or may damage the mouth if not swallowed whole. Patients should be advised (where relevant) that some modified-release preparations can be broken in half, but that the halved tablet should still be swallowed whole, and not chewed or crushed. Some capsules containing coated granules can be opened and the contents swallowed whole.	<b>Enteric coated, modified release, unpleasant tasting medication</b> (i.e. zopiclone)  Plus acamprosate, ciprofloxacin, isosorbide mononitrate, metronidazole, mirtazapine (tabs), <b>PPIs</b> (i.e., lansoprazole – not orodispersible, omeprazole (tabs not caps), pantoprazole GR, rabeprazole etc.)
26	Dissolve this medicine under your tongue.	To be used on preparations designed for sublingual use. Patients should be advised to hold under the tongue and avoid swallowing until dissolved. The buccal mucosa between the gum and cheek is occasionally specified by the prescriber.	Asenapine, buprenorphine SL, glyceryl trinitrate SL, nicotine SL
27	Take with a full glass of water.	To be used on preparations that should be well diluted (e.g. chloral hydrate), where a high fluid intake is required (e.g. sulfonamides), or where water is required to aid the action (e.g. methylcellulose). The patient should be advised that 'a full glass' means at least 150mL. In most cases fruit juice, tea, or coffee may be used.	Allopurinol, doxycycline, metronidazole

<b>28</b>	Spread thinly on the affected skin only.	<i>To be used on preparations that can thin the skin</i>	<b>Topical corticosteroids</b> i.e. betamethasone, clobetasol propionate, hydrocortisone etc., dithranol
<b>Trust advisory</b>	<b>Administration warning</b>	<b>Why is this important</b>	<b>Drugs or Example of Drugs</b>
<b>A-C</b>	Tablets should be swallowed whole with plenty of water whilst sitting or standing: take on an empty stomach at least 30 minutes before breakfast (or another oral medicine): patient should stand or sit upright for at least 30 minutes (60 minutes for ibandronic acid) after taking the tablet.	<i>To be used for bisphosphonate preparations: Remain upright to prevent risk of oesophageal reactions. Calcium products reduce absorption before or after administration of bisphosphonate.</i>	Alendronic acid Ibandronic acid Risedronate
<b>D</b>	<b>Avoid grapefruit juice</b>	<i>Grapefruit juice (possibly) increases the concentrations of some drugs, increasing risk of toxicity, therefore avoid concurrent use. (See BNF appendix 1: interactions).</i>	<b>Calcium channel blockers</b> (e.g. amlodipine, nifedipine), lurasidone, quetiapine, sertraline, <b>statins</b> (atorvastatin, simvastatin),
<b>E, 25</b>	Dutasteride is absorbed through the skin; therefore, contact with leaking capsules must be avoided. If contact is made, wash the contact area immediately with soap and water.	<i>Staff who are pregnant or of childbearing potential should not handle broken tablets of finasteride or leaking capsules of dutasteride. This can affect a developing foetus.</i>	Dutasteride
<b>F</b>	Finasteride tablets – anyone of childbearing potential should avoid handling crushed or broken tablets.		Finasteride
<b>G</b>	GTN spray: 1 or 2 sprays under the tongue and then close the mouth - a minimum of 5 mins between consecutive treatments. If chest pain not resolved after 15 mins call (9)999.	<i>Instructions for using glyceryl trinitrate spray for the treatment of an angina attack.</i>	Glyceryl trinitrate (GTN) spray
<b>H</b>	<b>Avoid cranberry juice</b>	<i>Anticoagulant effect possibly increased by cranberry juice, therefore avoid concurrent use. (see BNF appendix 1: interactions)</i>	Warfarin
<b>I</b>	<b>Cytotoxic – Handle with care.</b>	<i>Cytotoxic materials can be absorbed by the skin if handled without gloves or tablets broken or preparation spilt.</i>	Cytotoxics e.g. methotrexate (include cytotoxic handling leaflet with chart - HSE Information Sheet MISC615)
<b>J</b>	<b>Rinse the mouth with water after use.</b>	<i>Corticosteroid inhalers leave a deposit of steroid on the mouth which can cause oral thrush. This is easily removed by rinsing the mouth after use or prescribing a spacer device.</i>	Corticosteroid inhalers
<b>K</b>	<b>Do not swallow.</b>	<i>Potential toxic effect if swallowed in large quantities or smaller amounts regularly.</i>	Mouthwash, toothpaste, Tiotropium capsules
<b>L</b>	<b>Caution – risk of bleeding</b>	<i>Increased risk of cerebral bleed if patient falls and also increased risk of bleeding from cuts and increased risk of bruising.</i>	Antithrombotic drugs (warfarin, rivaroxaban, apixaban, dabigatran, edoxaban), low molecular weight heparins (tinzaparin, enoxaparin, dalteparin)
<b>M</b>	<u>Trust Policy - Methadone overdose</u>  Give a dose of naloxone 400micrograms by sc/im: If no response after 1 minute give 800micrograms, and if no response after another minute, repeat dose of 800micrograms, If still no response give 2mg (4mg may be required in a seriously poisoned patient). Seek medical advice.	<i>Refer to TEWV Methadone and Buprenorphine in-patient prescribing guidelines. Always include naloxone on the prescription, in case of overdose.</i>	Methadone
<b>N</b>	<u>Trust Policy - Buprenorphine overdose</u>  Give a dose of naloxone 400micrograms by sc/im: If no response after 1 minute give 800micrograms, and if no response after another minute, repeat dose of 800micrograms, If still no response give 2mg (4mg may be required in a seriously poisoned patient). Seek medical advice.		Buprenorphine