

## Medal Ranking - Calcium and Vitamin D Supplements

Medal rankings provide prescribers with a quick overview on cost-effective prescribing in areas where the formulary product choices have little therapeutic difference.

**Please routinely prescribe the agents offering greatest overall value to the health economy.**

### Contents

Summary .....	1
Rationale.....	2
Illustrative cost saving.....	2
Actions .....	3
References.....	3

### Summary

Choice	Cost per month	Recommended dose	Other info	Approval
<b>Evacal D3® chew tabs</b>	<b>£2.95</b>	<b>One BD</b>	Tutti-frutti No soya bean oil*	
<b>Accrete D3® tabs</b>	<b>£2.95</b>	<b>One BD</b>	Swallow whole	
<b>Accrete D3 One a Day chew tablets</b>	<b>£2.95</b>	<b>One OD</b>	Orange No soya bean oil*	
<b>Adcal D3® caplets</b>	<b>£3.16</b>	<b>Two BD</b>	Swallow whole. No soya bean oil*	
<b>Natecal D3® chew tabs</b>	<b>£3.63</b>	<b>One BD</b>	Aniseed, peppermint, molasses	
<b>Adcal D3® chew tabs</b>	<b>£3.91</b>	<b>One BD</b>	Lemon, tutti-frutti	
<b>Calcichew D3 Forte® chew tabs</b>	<b>£4.24</b>	<b>One BD</b>	Lemon No soya bean oil*	
<b>Calfovit D3 powder</b>	<b>£4.32</b>	<b>One sachet at night</b>	Available as an option where cannot swallow or chew tab. No soya bean oil* Anecdotal evidence can be used for PEG/NG.	
<b>Calcichew D3® caps</b>	<b>£4.46</b>	<b>One BD</b>	Swallow whole	
<b>Adcal D3® dissolve</b>	<b>£6.42</b>	<b>One BD</b>	Available as an option where cannot swallow or chew tab. Lemon. Anecdotal evidence can be used for PEG/NG.	
<b>Cacit D3® granules</b>	<b>£8.12</b>	<b>Two sachets per day</b>	Available as an option where cannot swallow or chew tab. Confirmed <sup>1,2</sup> acceptable to use for PEG/NG	

Calcichew D3® chew tabs	Do not use – inadequate levels of calcium and/or vitamin D	
Kalcipos D® chew tabs & regular tabs		

**\*All the products contain soya bean oil unless indicated; soya bean oil products should be avoided in patients with a peanut and/or soya bean allergy**

Use first line  
 Use second line  
 Try to avoid, use third line if needed  
 No formal commissioning position, avoid use  
 Not commissioned. **Do not use**

[Back to top](#)

### Rationale

Osteoporosis occurs most commonly in postmenopausal women and in those taking long-term oral corticosteroids (glucocorticosteroids). Other risk factors for osteoporosis include low body weight, cigarette smoking, excess alcohol intake, lack of physical activity, previous fracture and early menopause.

Patients at risk of osteoporosis should maintain an adequate dietary intake of calcium (700mg/day) and should take vitamin D 400units daily, if not exposed to much sunlight. Daily dietary calcium intake can be considered using the [Calcium Calculator](#).

NICE CKS states that patients with inadequate levels of calcium should:

- Take 10 micrograms (400 international units) of vitamin D with at least 1000 mg of calcium daily.
- Take 20 micrograms (800 international units) of vitamin D with at least 1000 mg of calcium daily for elderly people who are housebound or living in a nursing home.

There are no licenced combination preparations of 1000mg of calcium and 400units vitamin D, the NHS Vale of York CCG consider it appropriate to initiate one of the options in the summary table, for all patients with inadequate levels of calcium.

The aim of this medal ranking is primarily to reduce costs associated with calcium & vitamin D tablet prescribing.

[Back to top](#)

### Illustrative cost saving

If the silver medal ranked Calcichew D3 Forte chew tabs was replaced by the gold medal Evacal D3® chew tablets, in the last financial year the CCG saving would have been £22,500.

[Back to top](#)

## Actions

Review the choice of calcium and vitamin D products for patients with, or at risk of, osteoporosis who receive regular repeats. Where appropriate switch patients from silver and bronze products to gold choices, Evacal D3® chewable tabs would be the preferred gold choice but the medal ranking recognises this would not be suitable for all patients.

When prescribing calcium and vitamin D supplements consider:

- Swallowing difficulties
  - Evacal D3 is chewable, there are also sachet products available when required.
  - Calcium and phosphate levels
  - Kidney and parathyroid function
  - Caution should be exercised in patients with sarcoidosis
  - Any relevant allergies. Please note most calcium products contain peanut or soya oil and are therefore contra-indicated in patients with those allergies.
  - Different products are available in different flavour options and therefore patient preference is a factor.
  - Which products are suitable to be used down PEG/NG tubes – see table for advice.
- Calcium supplement should be taken twice daily as it is best absorbed from the intestine in smaller amounts (500-600mg or less) hence twice daily dosing. Once daily dosing, though not recommended, could be considered if compliance is an issue. The most cost effective product should be prescribed, i.e. Accrete D3 One a Day chew tablets or most cost effect twice daily preparation taken as a single dose. It may be beneficial that the patient will at least absorb some of the calcium rather than none of the second dose is missed.
- The calcium and vitamin D dose should be taken 4 hours after any bisphosphonate treatment. The simplest option is for the patient to omit the calcium and vitamin D supplement dose on the morning they take their bisphosphonate.
- Calcium and vitamin D supplements should be prescribed by brand name, as brand name prescribing aids identification and ensures the patient receives a product they are familiar with.

[Back to top](#)

## References

1. [Enteral Feeding Guide – Medicines complete https://www.medicinescomplete.com](https://www.medicinescomplete.com)
  2. [NEWT Guidelines http://www.newtguidelines.com/](http://www.newtguidelines.com/)
  3. <https://www.medicines.org.uk/emc/>
  4. Mechanisms of intestinal calcium absorption. *J Cell Biochem.* 2003 Feb 1;88(2):387-93 [PubMed](#)
  5. UKMI - Which medicines should be considered for brand-name prescribing in primary care? <http://www.evidence.nhs.uk/search?q=%22Which+medicines+should+be+considered+for+brand%22>
  6. NICE CKS - Osteoporosis - prevention of fragility fractures. <https://cks.nice.org.uk/osteoporosis-prevention-of-fragility-fractures#!scenario:1>
  7. Drug Tariff April 2017. <http://www.drugtariff.nhsbsa.nhs.uk/>
- [Back to top](#)