Calcium and Vitamin D Preparations

**CALCIUM CONTENT OF ORAL CALCIUM PREPARATIONS**

<table>
<thead>
<tr>
<th>Calcium (Ca) salt</th>
<th>Tablet size, mg</th>
<th>Elemental Ca, mg, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbonate</td>
<td>1250</td>
<td>500 (40)</td>
</tr>
<tr>
<td>Acetate</td>
<td>667</td>
<td>169 (25)</td>
</tr>
<tr>
<td>Citrate</td>
<td>950</td>
<td>200 (21)</td>
</tr>
<tr>
<td>Lactate</td>
<td>325</td>
<td>42 (13)</td>
</tr>
<tr>
<td>Gluconate</td>
<td>500</td>
<td>4.5 (9)</td>
</tr>
</tbody>
</table>

Fractional intestinal absorption of Ca may differ between Ca salts. Data from McCarthy and Kumar [19] and Physicians’ Desk Reference [23].

**VITAMIN D PREPARATIONS AVAILABLE IN THE UNITED STATES**

<table>
<thead>
<tr>
<th>Commercial name</th>
<th>Oral preparations</th>
<th>Usual daily dose</th>
<th>Time until increase in serum calcium</th>
<th>Time for reversal of toxic effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ergocalciferol (Vitamin D₃)</td>
<td>50,000 IU tablets</td>
<td>50,000-500,000 IU</td>
<td>4-8 wk</td>
<td>17-60 d</td>
</tr>
<tr>
<td>Calcifediol (25-hydroxy-vitamin D₃)</td>
<td>20- and 50-µg capsules</td>
<td>20-200 µg</td>
<td>2-4 wk</td>
<td>7-30 d</td>
</tr>
<tr>
<td>Dihydrotachysterol</td>
<td>0.125-, 0.2-, 0.4-mg tablets</td>
<td>0.2-1.0 mg</td>
<td>1-2 wk</td>
<td>3-14 d</td>
</tr>
<tr>
<td>Calcitriol (1,25-dihydroxy-vitamin D₃)</td>
<td>0.25- and 0.50-µg capsules</td>
<td>0.25-5.0 µg</td>
<td>4-7 d</td>
<td>2-10 d</td>
</tr>
</tbody>
</table>

In patients with hypoparathyroidism who have normal renal function. Data from McCarthy and Kumar [19] and Physicians’ Desk Reference [23].

*Not currently advised in patients with chronic renal failure.
5.14 Disorders of Water, Electrolytes, and Acid-Base

References


