



**SUMMARY OF PRODUCT CHARACTERISTICS
(SmPC) TEMPLATE**

SUMMARY OF PRODUCT CHARACTERISTICS (SMPC)

DR. MEYER'S CALCITAB CAPLETS

1. NAME OF THE MEDICINAL PRODUCT

DR. MEYER'S CALCITAB CAPLETS (Calcium Carbonate BP 300mg, Dicalcium Phosphate BP 250mg, Vitamin D3 100 IU)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each caplet contains:

Calcium Carbonate BP 300mg

Dicalcium Phosphate BP 250mg

Vitamin D3 100 IU

Excipients:

Starch (Lubricant) BP 17mg

Talc BP 4mg

Magnesium Stearate BP 3.941mg

Starch (Bulk) BP 175mg

Starch (Paste) BP 47.35mg

Methyl-4-Hydroxy Benzoate 0.353mg

Propyl-4-Hydroxyl Benzoate 0.177mg

Sunset Yellow 0.90mg

For Full list of excipients refer section 6.1

3. PHARMACOLOGICAL FORM

Caplet

Orange coloured caplet with 'CALCITAB' on one side & breakline on the other side presented in a blister strip of 10 caplets. 6 of such strips are packed in a carton.

4. CLINICAL PARTICULARS

4.1 Therapeutic Indications

As an adjunct to specific therapy for osteoporosis and in situations requiring therapeutic supplementation of malnutrition e.g. in pregnancy and established vitamin D dependent osteomalacia.

The prevention and treatment of calcium deficiency/vitamin D deficiency especially in the housebound and institutionalised elderly subjects. Deficiency of the active moieties is indicated by raised levels of PTH, lowered 25-hydroxy vitamin D and raised alkaline phosphatase levels which are associated with increased bone loss.

4.2 Posology and Method of administration

Adults and Elderly and children above 12 years of age: One caplet to be taken two to three times daily.

Children 7 – 12 years: Half the dose of adult.

To be taken before meals

Method of administration

Oral

4.3 Contraindications

Absolute contra-indications are hypercalcaemia resulting for example from myeloma, bone metastases or other malignant bone disease, sarcoidosis; primary hyperparathyroidism and vitamin D overdosage. Severe renal failure. Hypersensitivity to any of the caplet ingredients.

Relative contra-indications are osteoporosis due to prolonged immobilisation, renal stones, severe hypercalciuria.

4.4 Special Warnings and Precautions for Use

Patients with mild to moderate renal failure or mild hypercalciuria should be supervised carefully including periodic checks of plasma calcium levels and urinary calcium excretion.

In patients with a history of renal stones urinary calcium excretion should be measured to exclude hypercalciuria.

With long-term treatment it is advisable to monitor serum and urinary calcium levels and kidney function, and reduce or stop treatment temporarily if urinary calcium exceeds 7.5mmol/24 hours (300mg/24 hours).

Caution is required in patients receiving treatment for cardiovascular disease (see Section 4.5 – thiazide diuretics and cardiac glycosides including digitalis).

Calcitab should also be used with caution in other patients with increased risk of hypercalcaemia e.g. patients with sarcoidosis or those suffering from malignancies.

Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

Allowances should be made for calcium and vitamin D supplements from other sources.

Excipient warnings:

This medicine contains sodium parahydroxybenzoates which may cause allergic reactions (possibly delayed).

Keep out of reach of children.

Do not exceed recommended daily dose/amount

4.5 Interactions with other medications

The risk of hypercalcaemia should be considered in patients taking thiazide diuretics since these drugs can reduce urinary calcium excretion. Hypercalcaemia must be avoided in digitalised patients.

Certain foods (e.g. those containing oxalic acid, phosphate or phytinic acid) may reduce the absorption of calcium.

Concomitant treatment with phenytoin or barbiturates can decrease the effect of vitamin D because of metabolic activation. Concomitant use of glucocorticoids can decrease the effect of vitamin D.

The effects of digitalis and other cardiac glycosides may be accentuated with the oral administration of calcium combined with Vitamin D. Strict medical supervision is needed and, if necessary monitoring of ECG and calcium.

Calcium salts may reduce the absorption of thyroxine, bisphosphonates, sodium fluoride, quinolone or tetracycline antibiotics or iron. It is advisable to allow a minimum period of four hours before taking the calcium.

4.6 Pregnancy and lactation

During pregnancy and lactation treatment with Calcitab should always be under the direction of a physician. During pregnancy and lactation, requirements for calcium and vitamin D are increased but in deciding on the required supplementation allowances should be made for availability of these agents from other sources. If Calcitab and iron supplements are both required to be administered to the patient, they should be taken at different times.

Overdoses of vitamin D have shown teratogenic effects in pregnant animals. However, there have been no studies on the use of this medicinal product in human pregnancy and lactation. In humans, long term hypercalcaemia can lead to physical and mental retardation, aortic stenosis and retinopathy in a new born child. Vitamin D and its metabolites pass into the breast milk.

4.7 Effects on ability to drive and use machines

The medication does not have any effect on ability to drive and use machines.

4.8 Undesirable effects

Hypersensitivity reactions including pruritus, wheezing, urticaria and oropharyngeal swelling have been reported in the postmarketing environment.

The use of calcium supplements has, rarely, given rise to mild gastro-intestinal disturbances, such as constipation, flatulence, nausea, gastric pain, diarrhoea. Following administration of vitamin D supplements occasional skin rash has been reported. Hypercalciuria, and in rare cases hypercalcaemia have been seen with long term treatment at high dosages.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme

4.9 Overdose

The most serious consequence of acute or chronic overdose is hypercalcaemia due to vitamin D toxicity. Symptoms may include nausea, vomiting, polyuria, anorexia, weakness, apathy, thirst and constipation. Chronic overdoses can lead to vascular and organ calcification as a result of hypercalcaemia. Treatment should consist of stopping all intake of calcium and vitamin D and rehydration.

5. Pharmacological Properties

5.1. Pharmacodynamic properties

Strong evidence that supplemental calcium and vitamin D₃ can reduce the incidence of hip and other non-vertebral fractures derives from an 18 month randomised placebo controlled study in 3270 healthy elderly women living in nursing homes or apartments for elderly people. A positive effect on bone mineral density was also observed.

In patients treated with 1200mg elemental calcium and 800IU vitamin D₃ daily, i.e. the same dose delivered by two tablets of Calcitab, the number of hip fractures was 43% lower ($p=0.043$) and the total number of non-vertebral fractures was 32% lower than among those who received placebo. Proximal femur bone mineral density after 18 months of treatment increased 2.7% in the calcium/vitamin D₃ group and decreased 4.6% in the placebo group ($p < 0.001$). In the calcium/vitamin D₃ group, the mean serum PTH concentration decreased by 44% from baseline at 18 months and serum 25-hydroxy-vitamin D concentration had increased by 162% over baseline.

Analysis of the intention-to-treat results showed a decreased probability of both hip fractures ($p = 0.004$) and other fractures ($p < 0.001$) in the calcium/vitamin D₃ treatment group. Analysis of the other two populations (active treatment and those treated and followed for 18 months) revealed comparable results to the intention-to-treat analysis. The odds ratio for hip fractures among women in the placebo group compared with those in the calcium/vitamin D₃ group was 1.7 (95% CI 1.0 to 2.8) and that for other non-vertebral fractures was 1.4 (95% CI 1.4 to 2.1). In the placebo group, there was a marked increase in the incidence of hip fractures over time whereas the incidence in the calcium/vitamin D₃ group was stable.

Thus treatment reduced the age-related risk of fracture at 18 months ($p = 0.007$ for hip fractures and $p = 0.009$ for all non-vertebral fractures). At 3 years follow-up, the decrease in fracture risk was maintained in the calcium/vitamin D₃ group.

5.2 Pharmacokinetic properties

The pharmacokinetic profiles of calcium and its salts are well known. Calcium carbonate is converted to calcium chloride by gastric acid. Calcium is absorbed to the extent of about 15-25% from the gastro-intestinal tract while the remainder reverts to insoluble calcium carbonate and calcium stearate, and is excreted in the faeces.

The pharmacokinetics of vitamin D is also well known. Vitamin D is well absorbed from the gastro-intestinal tract in the presence of bile. It is hydroxylated in the liver to form 25-hydroxycholecalciferol and then undergoes further hydroxylation in the kidney to form the active metabolite 1, 25 dihydroxycholecalciferol (calcitriol). The metabolites circulate in the blood bound to a specific α - globin, Vitamin D and its metabolites are excreted mainly in the bile and faeces.

5.3 Preclinical safety data

Calcium carbonate and vitamin D are well known and widely used materials and have been used in clinical practice for many years. As such toxicity is only likely to occur in chronic overdosage where hypercalcaemia could result.

6. Pharmaceutical Particulars

6.1 List of Excipients

Starch (Lubricant) BP	17mg
Talc BP	4mg
Magnesium Stearate BP	3.941mg
Starch (Bulk) BP	175mg
Starch (Paste) BP	47.35mg
Methyl-4-Hydroxy Benzoate	0.353mg
Propyl-4-Hydroxyl Benzoate	0.177mg
Sunset Yellow	0.90mg

6.2 Incompatibilities

None specific

6.3 Shelf-Life

36 Months

6.4 Special Precautions for Storage

Store below 30° C. Replace cap securely.

6.5 Nature and Contents of Container

Blister strip of 10 caplets. 6 of such strips are packed in a carton

6.6 Instructions for Handling

None specific.

7. Applicant / Manufacturer:

Farmex Meyer Limited

Km. 38, Lagos–Abeokuta Express Road,

Sango-Otta, Ogun State,

Nigeria.